VIDEO GAME RHETORIC AND MATERIALIST CONTINGENCY: GENRE, CIRCULATION, AND NARRATIVE

BY

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DISSERTATION

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ABSTRACT

As technology changes, people find new ways to entertain themselves, tell stories, and create imaginary worlds. This dissertation examines the development of *Dragon Quest*, a video game created for Nintendo's Famicom game console. I argue *Dragon Quest* provides insights into the rhetorical techniques that comprise video game design. Attending to *Dragon Quest* as digital rhetoric highlights how rhetorical contingencies shape the invention of, engagement with, and circulation of video games. This rhetorical analysis analyzes technical documents, business contracts, and popular video game press to provide a historical understanding of the economic, social, and aesthetic exigencies that shaped *Dragon Quest*. In the first chapter, I trace the emergence of the role-playing game (RPG) in the United States, how it traveled to Japan, and the ways *Dragon Quest* utilized conventions of this genre. In the second chapter, I attend to the patterns of circulation that *Dragon Quest* traveled once it left Japan and Enix sold it to North Americans as *Dragon Warrior*. Chapter three looks at how *Dragon Quest* creates a linear narrative form through the management of game spaces. The dissertation concludes by arguing that rhetorical analysis of a video game as rhetorical history brings new understandings to how critics might engage the material and economic components of genre, circulation, and narrative. The contingent materials that constitute digital media both allow for and delimit how game designers might approach the creative process. The relationship between technology and human being, however, allows for new rhetorical possibilities, even as other rhetorical possibilities become negated, disadvantageous, or impractical.

Dedicated to my cat, Romeo.

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INTRODUCTION

At the end of 2014, *New York Times* writer Chris Suellentrop suggested that the video game industry faced a struggle between the artists that produced games and the audiences that consumed them.[1] The conflict between creators and consumers resulted from the gaming industry running out of "external threats," such as politicians rallying against the industry. The gaming industry, it seemed, had become both large and old enough to feature infighting. This did not mean that the industry had become less lucrative. Offering a positive view of the game industry just six months prior to Suellentrop, online journalist Jenna Pitcher explained that video game producers were shifting design attention to an ever-growing market of cell phone users.[2] Pitcher predicted that by 2018, audiences would purchase roughly 30 percent of gaming software for play on mobile phones and tablets, and the industry expected a windfall of over $100 billion.[3] *Fortune* magazine printed an article echoing the migration of games onto cellphones and mobile in January, 2015.[4] Even if infighting caused rifts between those creating games and those playing them, it would still result in profits for numerous companies.

In the sphere of rhetorical studies, the opening of 2015 meant both an accounting for current research trends and suggestions for future research paths. As is often the case with centennial celebrations, the *Quarterly Journal of Speech*'s 100th volume featured essays recounting the history of the journal, current trends in rhetorical research, and potential directions toward which researchers should steer. Several essays recognized important shifts in the study of rhetoric. Andrew King, for

[1] Chris Suellentrop, "Death Threats, and Other Growing Pains: Why 2014 was a Troubling Year for Video Games," *New York Times*, December 11, 2014, accessed March 21, 2015 from http://www.nytimes.com/2014/12/14/arts/video-games/why-2014-was-a-troubling-year-for-video-games.html.

[2] Jenna Pitcher, "Games Industry Revenue May Hit $100 Billion by 2018, Says Research Firm," *Polygon*, June 25, 2014. Accessed March 21, 2015 from http://www.polygon.com/2014/6/25/5840882/games-industry-revenue-hit-100-billion-by-2018-dfc-Intelligence.

[3] Ibid.

[4] John Gaudiosi, "Mobile Game Revenues Set to Overtake Console Games in 2015," *Fortune*, January 15, 2015. Accessed March 21, 2015 from http://fortune.com/2015/01/15/mobile-console-game-revenues-2015/.

instance, called attention to researchers' rightful attention to power dynamics, and suggested that rhetorical critics respond to the economic arguments that now direct many public arguments.[5] Raymie McKerrow argued in this same volume that the future of rhetorical studies should be open to international understandings of rhetorical practices.[6] Martin Medhurst explored elements of rhetorical criticism the journal has moved away from, including translating speeches from other languages, authenticating speeches that appeared in print and examinations of rhetorical practices from the Middle Ages through the 1800's, and interviews with everyday practitioners of rhetoric such as speechwriters and politicians.[7] Like journalists writing on video games, rhetorical theorists were oriented toward the future: predicting where research would take them, deciding which paths should endure and which practices would become abandoned.

This dissertation merges the concerns of rhetorical scholars with those voices in public culture that are interested in the medium of video games. I argue that attending to the technological history of video games can further understanding the relationships between media and rhetoric in the 21st century. However, attending to "video games" in the general sense seems doomed at the outset—individual video games have varied histories, are complexly layered, and by nature incorporate the shifting cultural meanings present in the social practices that constitute them. Therefore, scholarly attention to video games as a rhetorical medium, benefits from close scrutiny of a singular video game artifact. Before engaging the broader questions of what video games can do rhetorically, it is important to recognize the situations that shape the creation of an individual game. This dissertation elucidates the processes of rhetoric involved in the creation, circulation, and playing of a specific 1980s video game, *Dragon Quest*. By undertaking an analysis of a specific video game, I reveal important rhetorical

[5] Andrew King, "Scholarship Yesterday, Today, and Tomorrow," *Quarterly Journal of Speech,* 101 n. 1 (2015): 127-131.
[6] Raymie E. McKerrow, "'Research in Rhetoric' Revisited," *Quarterly Journal of Speech,* 101 n. 1 (2015): 151-161.
[7] Martin J. Medhurst, "Looking Back on Our Scholarship: Some Paths Now Abandoned," *Quarterly Journal of Speech,* 101 n. 1 (2015): 186-196.

processes embedded in the ubiquitous computing technologies of the late 20th and early 21st century. Attending to video games expands our understanding of how the materials of computing interfaced with gaming consoles, and this examination of technology allows for new insights into the rhetorical foundations that guide mediated communication.

As a new medium, video games have attracted and inspired diverse opinions over the nature of many taken-for-granted communication phenomena. One of the first and most divisive debates in game studies followed an interest in narrative and concerns whether video games in general can tell stories at all. Psychoanalytic critic Peter Buse's 1996 essay, "Nintendo and Telos" exemplified this early thrust of game studies. In his essay, Buse attempted to show how video games fall within narrative categories by emphasizing their management of different psychoanalytic drives: "Thinking of video games in terms of narrative may seem like a paradoxical operation, an encounter between an old-fashioned concept and a thoroughly modern phenomenon. Paradoxical or not, video games without fail deploy some variety of skeleton plot, usually culled from the adventure genre."[8] Narrative, in this perspective, naturally applies to video games as easily as it would to novels.

Other theorists, however, have been quick to warn critics away from the "literary" criticism of games. For example, Epsen Aarseth contended that the nonlinear audience experiences offered by games are not merely another form of narrative ambiguity, but rather their own distinct form of media experience.[9] Gonzalo Frasca, building from Aarseth's critique of literary theorizing, used the term "ludology" to denote an interpretation of video games as "simulations" rather than "narratives."[10]

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[8] Peter Buse, "Nintendo and Telos: Will You Ever Reach the End?," *Cultural Critique,* n. 34 (Autumn, 1996): 165. Accessed June 10, 2015, doi: 10.2307/1354616. Theorists Gitte Jantzen and Jans F. Jensen conclude that video games are narratives because video games follow the structural patterns of known narrative forms like folklore. See Gitte Jantzen, and Jans F. Jensen. "Powerplay-Power, Violence and Gender in Video Games." *AI & Society,* 7 n. 4 (1993): 368-385. Accessed June 10, 2015, doi: 10.1007/BF01891418.

[9] Epsen Aarseth, *Cybertext,* (Baltimore, Maryland: John Hopkins University Press, 1997).

[10] Gonazlo Frasca, "Simulation versus Narrative: Introduction to Ludology," in *The Video Game Theory Reader*, ed. Mark J. P. Wolf and Bernard Perron, (New York: Routledge, 2003), 221-235.

Simulation logic, for Frasca, is integral to the open-endedness that video games allow players, and it is necessary for critics to engage the different levels of rule systems within simulation.

Yet many contemporary video games can and do tell stories, and thus narrative analyses can provide important insights into what and how video games come to mean. This is especially the case as one considers how video games draw on other media forms. Media critic Ewan Kirkland accurately describes the narrative approach to video game criticism as emphasizing "more static storytelling aspects, regarding video games as texts to be read, often in relation to other media forms."[11] As Kirkland argues, the video games explicitly *make reference* to narratives in other media forms and therefore attest to the usefulness of drawing on already established forms of narrative critique in approaching video games. Recent research suggests that many video games require both the analysis of the rule systems advocated by ludologists and the attention to stories offered by narratologists. Combining both approaches to interpreting games provides more complete pictures a game's structure and meaning. Both Chee Sian Ang and James Paul Gee come to the same conclusion in different articles—criticism of video games requires both rule analysis and attention to textual, or narrative, elements.[12]

Ian Bogost also argues that narratologists and ludologists, in their extremes, both miss the point: "A reformulated version of the question of ludology versus narratology might ask if games need to produce stories, while acknowledging that they might be able to do so."[13] Moreover, while it is clear that games, from the perspective of their basic technological structure, need to be made up of rule systems but do not need to tell stories, it is also clear that from the perspective of producers that games

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[11] Ewan Kirkland, "Restless Dreams in Silent Hill: Approaches to Video Game Analysis," *Journal of Media Practice*, 6 n. 3 (2005): 167-178. Accessed June 10, 2015, doi: 10.1386/jmpr.6.3.167/1.

[12] Chee Sian Ang, "Rules, Gameplay, and Narratives in Video Games," *Simulation Gaming*, 37 n. 3 (2006), 306-325. Accessed June 10, 2015, doi: 10.1177/1046878105285604; James Paul Gee, "Stories, probes, and games," *Narrative Inquiry,* 21 n. 2 (2011): 353-357. Accessed June 10, 2015, doi: 10.1075/ni.21.2.14gee.

[13] Ian Bogost, *Unit Operations: An Approach to Videogame Criticism* (Cambridge, Massachusetts: The MIT Press, 2006), 70.

may be seen as needing to tell stories in order to sell.

Moving beyond the question of "what are video games?" improves our understanding of the medium by bringing the multiple factors that influence the structure and meaning of *any particular video game* clearly understandable. While video games do not necessarily have to tell stories, producers often approached them as having to tell a story in order to address certain perceived market exigencies. In such cases, a game's producer will make various and sometimes competing technological, creative, and marketing decisions as they seek to transform a rule system into a story. The producer faces a set of priorities that might compete with each other for importance. For instance, producers make decisions based upon which stories or story genres will be both narratively compelling and marketable, whether stories will still feel like a "game" to audiences, and which available technological capacities are to be used or need to be created for the effective communication of these stories. Ultimately, producers contemplate how games should look and feel to users and by what technological means users should play or otherwise interact with a game. Such questions are at their basis *rhetorical* decisions and concern means of convincing and establishing identification within a given, contingent situation. The core issue for producers, then, is the central rhetorical task of "persuading" rule systems to assume a narrative form, or, as the case may be, "identifying" a narrative with distinct rule systems. As reflected in Kenneth Burke's introduction to *A Grammar of Motives*, terminologies and language use are rife with ambiguities.[14] Like the terms of Burke's pentad, "narrative" and "rule-system" are but symbolic attempts at naming and creating distinctions in ways that set games into rigid categories, in spite of the ambiguities of the language used to describe them. Instead of focusing on the rigidness of treating video games from within the terministic screens of "narratology" or "ludology," which attempt to minimize the ambiguous nature of video games, I shall instead endeavor to follow Burke's lead and

[14] Kenneth Burke, *A Grammar of Motives*, California ed. (Berkeley, CA: University of California Press, 1969), 61-62.

make it my goal "to study and clarify the resources of ambiguity."[15] The goal of this dissertation is to illuminate the rhetorical devices and strategies used by game producers that lead to the "rule systems" and "stories" that players experience and treat these decisions as occurring within a specific technological and economic context.

Storytelling has long been converted into supra-verbal media forms, and narratives within different media are a perennial interest of scholars. For instance, David Bordwell examines how narratives became filmic.[16] Seymour Chatman has done helpful comparative work that takes several different media, including film, and discusses how they compare to popular written narratives.[17] Such work has led scholars to wrestle with the basic structure of narrative. In *Narrative across Media*, Marie-Laure Ryan charges that for a text to "have narrative," it must create or reference "a world and populate it with characters and objects" and that this world experiences changes to its objects or characters.[18] Ryan adds that the myriad narrative components, such as characters, motives, and descriptions of events must be made intelligible to an audience. Ryan makes the distinction between the ontological status of having all three of these traits ("being narrative,") and understanding the text as *communicating* or *evoking* the qualities of narrative ("having narrativity").[19] This idea has important implications for the rhetorical study of video games, as it places the responsibility for an artifact's intelligibility as a story on the producers of said artifact. Similarly, Ryan situates narrative itself as a function of rhetorical skill where expert authors and producers must effectively garner the characteristics of their chosen medium to communicate with their audiences in ways that suggest the telling of a specific tale, story, or legend.

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[15] Ibid., xix.
[16] David Bordwell, *Narration in the Fiction Film*, (London, England: Routledge, 1985).
[17] Seymour Chatman, *Story and Discourse: Narrative Structure in Fiction and Film*, (Ithaca, New York: Cornell University Press, 1978).
[18] Marie-Laure Ryan, "Introduction," In *Narrative Across Media: The Languages of Storytelling*, ed. Marie-Laure Ryan (Lincoln, NE: University of Nebraska Press, 2004), 9.
[19] Ibid.

Ryan's "narrativity" argument speaks to a deeper relationship between communication and technology: where the technology "affords" would-be rhetors specific capacities to communicate. In science and technology studies, theorists have come to use the term "affordance" to speak to what media allow us to do. In *The Design of Everyday Things*, Don Norman refers to affordance as a relational term between individuals and particular technologies. He writes, "The term affordance refers to the relationship between a physical object and a person….An affordance is a relationship between the properties of an object and the capabilities of the agent that determine just how the object could possibly be used."[20] Norman carefully points out that an affordance is not a quality of an object, per se, but rather, it is about interactions between objects and people. Klaus Krippendorff argues that "Affordances are the basic units of meaning in the use of artifacts. They are perceptions of what can be done with an artifact, its parts, and its controls."[21] A video game or digital technology demands attention, perhaps because it affords a constant incompleteness, a need for the audience to *do* something.[22]

Affordance provides an important recognition that it is a perceptual relationship with agents, objects and materials. Our understandings of what those relationships are frame the use of communication media. Air affords the creation of sound. Ink on paper affords visual translation of sound into letters. Affordances shape both the processes of rhetorical invention and the processes which direct dissemination of a message. As an ongoing relationship between creator of meaning and the material that hosts, carries, or transmits that meaning, affordances call attention to how humans relate materially to their modes of communication. This concept can further elucidate the rhetorical

[20] Don Norman, *The Design of Everyday Things, Expanded Edition* (New York, New York: Basic Books, 2013), 11.
[21] Klaus Krippendorff, *The Semantic Turn: A New Foundation for Design*, (Boca Raton, Florida: Taylor and Francis, 2006), 142.
[22] Both Norman and Krippendorf turn to James J. Gibson in their use of affordances. Gibson, a psychologist working with visual perception, explained his conception of affordances in the 1970s. See James J. Gibson, *The Ecological Approach to Visual Perception*, (Boston, Massachusetts: Houghton Mifflin Company, 1979).

properties of video games as they emerge from the interaction between creators, audiences, and technologies. Looking to the affordances granted by technologies can help scholars recognize which design strategies were available to game designers, what strategies might be more beneficial than others, and which strategies needed additional technological support.

To provide a better understanding of the ways video games as a medium are converted into stories, and how those stories are converted into games, I consider the specific strategies adopted by Japanese video game developer Enix as it adopted the generic characteristics of Western role-playing games for a Japanese audience in the classic game *Dragon Quest*. These strategies were multifold and informed by the creative strivings of game producers, the technological opportunities and limitations afforded by the gaming consoles, the ways different people interacted with these technologies, and marketing considerations specific to a new national context. Moreover, these strategies were contingent rather than necessary or inevitable. In as much as one can and should identify broader trends in the development of video games as narrative media, we should never forget that it could quite well have been otherwise.

Contingency in Rhetoric and Technology Studies

This dissertation furthers rhetorical studies and video game research by showing the generic, circulatory, and narrative contingencies that game developers rhetorically negotiate in the development of a video game. The *Oxford English Dictionary* offers several definitions of contingency, one of the first being, "The condition of being liable to happen or not in the future; uncertainty of occurrence or incidence."[23] Here, "contingency" refers to an interest in future events and planning for them. This understanding of "contingency" has informed several different projects in rhetorical studies that look at

[23] The Oxford English Dictionary, Online ed. s. v. contingency. Accessed July 24, 2012.

how communication responds to different contexts and attempts to deal with possible futures.[24] Scholars in Science and Technology Studies (STS) use "contingency" in a slightly different sense, focusing instead on "The quality or condition of being subject to chance and change, or of being at the mercy of accidents."[25] Applying contingency to subjects like technology typically leads STS scholars to demonstrate the accidental or chance elements of technological development.[26]

Rhetorical scholars have engaged issues of contingency since the Greeks. Rhetorical theorist James Jasinski argues that Aristotle's understanding of rhetoric "has as one of its fundamental concerns the negotiation or management of human contingency—helping people to live in a world where some things are possible, few things are absolutely necessary, and even fewer things are absolutely certain."[27] Aristotle remarks that rhetoric concerns itself with the possible, and that rhetoric focuses on propositions and options for what the audience should do.[28] Thomas B. Farrell positions rhetoric as a way of addressing the contingent nature of our own lives and histories.[29] Thus, we use rhetoric to sort through the likely and the unlikely, the honest and the dishonest, the just and unjust. Contingency, in this sense, becomes about how the future will unfold within a set of constraints. Indeed, contingency makes both choice and rhetoric necessary.

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[24] For an intellectual history of "contingency" see Marcio Seligmann-Silva, "Contingency," *Theory Culture Society,* 23 n. 2-3 (2006): 135-138. Accessed June 10, 2015, doi: 10.1177/0263276406023002114. For the role of contingency in fear appeals, see Michael William Pfau, "Who's Afraid of Fear Appeals? Contingency, Courage, and Deliberation in Rhetorical Theory and Practice," *Philosophy and Rhetoric*, 40 n. 2 (2007): 216-237. Accessed June 10, 2015, doi: 10.1353/par.2007.0024.

[25] The Oxford English Dictionary, Online ed. s. v. contingency. Accessed July 24, 2012.

[26] For example, see Olivier Coutard and Simon Guy, "STS and the City: Politics and Practices of Hope," *Science, Technology, & Human Values*, 32 n. 6 (2007): 713-734. Accessed June 10, 2015, doi: 10.1117/016224390303600.

[27] James Jasinski, "Contingency," in *Sourcebook on Rhetoric: Key Concepts in Contemporary Rhetorical Studies* (Thousand Oaks, CA: Sage Publications, 2001), 108.

[28] Aristotle, *On Rhetoric: A Theory of Civic Discourse,* 2nd ed., trans. George Kennedy (New York: Oxford University Press, 2007), 51.

[29] Thomas B. Farrell, *Norms of Rhetorical Culture* (New Haven, CT: Yale University Press, 1993), 77.

Robert Danisch points out that contingency can be treated in terms of both propositions and events.[30] Contingent propositions refer to the ability to propose, or suggest, models of action to be taken by the public. Events, in turn, are contingent when they arise out of human action. Danisch's two forms of contingency help distinguish how video games respond to and incorporate contingency. When playing a video game, the individual must make decisions on what actions they will take as they navigate the rule system within the game. In one sense, contingency is propositional in that players must have an idea of what actions are available to them. For a game developer, a successful game will present players with a compelling set of contingent propositions. At the same time, game developers must correctly anticipate the consequences of player choice if they are to effectively tell a story. Therein lies the central problem facing would-be storytellers working within the medium of video games: how does one successfully create contingent events to correspond to the propositions available to players so that those events correspond to a narrative arc?

In many ways, video games provide a concrete example of what Henry Jenkins calls "convergence culture."[31] Jenkins sees technology as offering a way to "condense" the purposes of multiple objects into a singular technology. Although this process has yet to complete, Jenkins describes convergence as "more than simply a technological shift."[32] He writes, "Convergence alters the relationship between existing technologies, industries, markets, genres, and audiences."[33] In video games, humanity has seen a remarkable convergence of multiple media forms. Computer systems that were developed for research and business purposes have merged with parlor games. Game rules have, in turn, merged with cut scenes to form cinematic games.

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[30] Robert Danisch, "Political Rhetoric in a World Risk Society," *Rhetoric Society Quarterly*, 40 n. 2 (2010), 172-192. Accessed June 25, 2015, doi: 10.1080/02773941003614456.
[31] Henry Jenkins, *Convergence Culture* (New York: New York University Press, 2006).
[32] Ibid., 15.
[33] Ibid.

As Adriana de Souza e Silva and Daniel M. Sutko show, video game designers can utilize internet technologies and wireless signals to create hybrid-reality games, where the digital spaces of video games and the material spaces of reality merge and converge.[34] Technologies that allow for video games have become ubiquitous; we can now play games on our cell-phones, on consoles connected to televisions, on computers in the office, on handheld tablets, and, every once in a while, on large cabinets in arcades. Videogames are not a technological monolith, and the technologies used to create video games are often different depending on the national, cultural, geographic, and historical context. As new advances in computing and digital communication have emerged, video game systems often incorporate or adapt to them. The handheld Nintendo 3DS, for instance, allows for perception of its images in three dimensions. The 3DS is also equipped with cameras so that it can take three dimensional photographs. Comparing this newer machine to older game systems, such as the Atari 2600 or Game Boy, reveals revolutionary new potentials for game design. Historically contextualizing games within their historical context can provide rhetorical scholars with insight into what technologies mattered when creating games and how those technologies were used.

The relationship between contingency and video games provide a fruitful scholarly context to examine rhetorical decisions that game designers make. This dissertation merges the STS and rhetorical studies definitions of contingency, emphasizing both the "subject to chance" and "sorting through possible futures" that video games highlight. Returning to the STS sense of contingency reminds critics that video game technologies did not inevitably or naturally develop, and that in many cases, these technologies resulted from actions taken by developers responding to events within the industry. The rhetorical sense of contingency, however, urges the consideration of video game technologies as design decisions meant to direct future events. "Contingency" as treated by these two scholarly traditions

[34] Adriana de Souza e Silva and Daniel M. Sutko, "Playing Life and Living Play: How Hybrid Reality Games Reframe Space, Play, and the Ordinary," *Critical Studies in Media Communication*, 25 n. 5 (2008): 447-465. Accessed June 10, 2015, doi: 10.1080/15295030802468081.

emphasizes different temporal moments in the act of communicating. For STS, contingency looks backward at the historical moments in which scientists (or in this case, video game designers) created their projects and approached their livelihoods. The rhetorical sense of contingency urges "looking forward," and positions the scholar in relationship to potential futures. Here, contingency emphasizes what might be instead of the historical moments of what was. Combining these two notions of contingency urges a historical grounding of possibility—a recognition that rhetors of the past *made sense of their current positions and directed their actions so that future events would unfold in specific ways.* STS and its emphasis on technology as accidental can highlight the ways available technologies have accidental roles in shaping discourse, where rhetorical studies can highlight the role of human agency in working with these incidental resources.

Temporally, contingency occurs during multiple points in the rhetorical process, and video games can help make these moments clear to rhetorical theorists. These moments include activities of invention, when game developers encounter and create an artifact using conventions within a genre. These moments also constitute the periods of time when designers circulate a video game among a gaming audience through processes of advertising and translation into new cultural contexts. With video games, these rhetorical moments also extend into the moment when audience members encounter the potential presence of narrative elements. By examining *Dragon Quest*, I draw upon historical moments when game designers appropriate and remediate fantasy literature and tabletop gaming into technology, thereby drawing attention to numerous rhetorical strategies taken for granted when previous generations communicated with older media forms.

Video games are useful artifacts for exploring the relationships between rhetorical strategies and the technological properties of different media, particularly as those media are connected to the production of economic capital. Communication theorist David Altheide argues, "Computer games

illustrate how information technology and communication formats can alter behavior and even produce new approaches to mediatized social control."[35] According to rhetorical critic Roger Stahl, video games have become a primary site for the militarization of an U. S. audience's subjectivity as commercial game producers and the U. S. military combine social and economic capital.[36] Media critic Deborah Thomson points to marketing campaigns that use video games to frame sugary cereals as more valuable than more nutritional foods.[37] The international nature of the video game industry has led Canadian cultural critics Stephen Kline, Nick Dyer-Witheford, and Greig De Peuter to conclude, "The video and computer game industry also exemplifies the globalizing, transnational logic of twenty-first-century capital."[38] As a digital medium, computer games almost always operate within the market logics of capitalism, and these same games will replicate the patterns of commodification and exploitation of capitalism writ large.

While critiques of video games as a market commodity abound, the ways specific games contribute to those market systems requires closer analysis. The economic systems in which producers create video games can expose rhetorical logics that might otherwise escape the critic's attention. The contingencies of the market, and the way that producers understand those contingencies, shed light on the production practices performed in creating individual games. Endeavors to analyze video games require deep contextualization within these market logics, as the rhetorical choices that shape these commercial endeavors often reveal assumptions made about these markets by game producers. *Dragon Quest*'s unique historical position within the 1980s, as well as its continued influence on current games,

[35] David L. Altheide "Media Logic, Social Control, and Fear," *Communication Theory,* 23 n. 3 (2013): 228. Accessed June 10, 2015, doi: 10.1111/comt.12017.
[36] Roger Stahl, "Have you Played the War on Terror?" *Critical Studies in Media Communication,* 23 n. 2 (2006): 112-130. Accessed June 10, 2015, doi: 10.1080/07393180600714489.
[37] Deborah M. Thomson, "Marshmallow Power and Frooty Treasures: Disciplining the Child Consumer through Online Cereal Advergaming" *Critical Studies in Media Communication,* 27 n. 5 (2010): 438-454. Accessed June 10, 2015, doi: 10.1080/15295030903583648.
[38] Stephen Kline, Nick Dyer-Witherford, and Greig De Peuter, *Digital Play: The Interaction of Technology, Culture, and Marketing,* (Montreal, Canada: McGill-Queen's University Press, 2003): 13.

makes this game an ideal starting point for understanding the interrelated elements of the status of a game as a commodity and the elements of historical contingency that shape a game's rhetorical production.

Dragon Quest as Rhetorical Object

The *Dragon Quest* video game franchise started within a small Japanese company venturing into a new industry. *Dragon Quest's* production company, Enix, started as a tabloid magazine publisher in 1975.[39] After a series of poor investments, CEO Yashiro Fukushima altered his company's direction by entering the software business in 1982, right before Nintendo released a new game system, the Nintendo Famicom, in Japan. To garner talent for this new enterprise, Fukushima created a fan contest and advertised it in the popular comic magazine *Shonen Jump*. This contest called for amateur game designers and offered cash prizes to three winners.[40] Yuji Horii, a regular contributor and reader of the magazine, entered the contest by creating and sending a tennis game. Fukushima hired Horii, along with another winner Koichi Nakamura, and the two began creating games for Japanese personal computer systems.[41] The success of Nintendo's Famicom led Enix to reprogram its games for this system, and during the reprogramming of a text based murder mystery game *Port Pier*, Horii and Nakamura began integrating game mechanics, including random monster battles, from the popular western role-playing game, *Wizardry*.[42] This integration of role-playing elements blossomed into the hugely popular *Dragon Quest*. Later, when Enix sold the game in the United States market, they would rename the game to *Dragon Warrior*.

[39] Chris Kohler, *Power Up: How Japanese Video Games Gave the World an Extra Life*, (Indianapolis, Indiana: Brady Games, 2004), 84.
[40] Ibid., 85.
[41] Ibid.
[42] Ibid.

In celebration of the *Dragon Quest/Dragon Warrior*[43] series' 25th anniversary, video game enthusiasts acknowledged several games that drew direct inspiration from *Dragon Warrior,* including titles like Capcom's *Breath of Fire,* and Nintendo's successful *Earthbound,* and the Square Soft's hugely popular *Final Fantasy*.[44] Several of the early *Dragon Warrior* games would be remade and re-released for later gaming systems, including the Nintendo Wii.[45] *Dragon Quest's* attractiveness as an object of study, then, comes from its ability to inspire future game developers into incorporating its game mechanics. *Dragon Quest* also endures as a popular gaming franchise in Japan. Repeated remakes of the game, including a translation into English called *Dragon Warrior*, indicate its importance within the gaming industry as a profitable commodity.

The context in which Enix translated *Dragon Quest* into *Dragon Warrior* also speaks to an important historical context for the development of video games. The Nintendo Entertainment System (NES) reflects a particularly interesting and important moment in the history of the video game industry. As both scholars and popular news sources have reported, the early 1980s were a critical time in the evolution of the video game industry. In 1983 the video game industry in North America suffered a deep market crash. During the industry's high point in 1982, it made roughly $3 billion dollars. However, in the span of only three years, the industry's profitability plummeted to a paltry $100

[43]Here, I refer to these games as *Dragon Warrior/Dragon Quest* purposely because the series has been released under both names at different times. However, I will not use these terms interchangeably. When "*Dragon Quest*" is discussed, I am specifically referring to the game as it was developed in 1980s Japan. When I write "*Dragon Warrior,*" I am discussing the game as it was released in the United States in 1989. For more details about the differences, see 1Up Staff, "The 25th Anniversary of Dragon Quest" 1up.com, May 27, 2011. Accessed July 18, 2012 from http://www.1up.com/features/dragon-quest-25th-anniversary.

[44] Ibid.

[45] For a more complete history of the *Dragon Quest* series, see Kurt Kalata, "The History of Dragon Quest," *Gamasutra: The Art & Business of Making Games*. February 4, 2008. Accessed July 18, 2012 from http://www.gamasutra.com/view/feature/131926/the_history_of_dragon_quest.php. For a recent announcement of the games being updating for the Wii, see Frank Cifaldi, "Square Enix Releasing Classic *Dragon Quest* Six Pack in Japan," *Gamasutra: The Art & Business of Making Games*, May 11, 2011. Accessed July 18, 2012 from http://www.gamasutra.com/view/news/124856/Square_Enix_Releasing_Classic_Dragon_Quest_Six_Pack_In_Japan.php

million. Only in 1987 did profits once again surpass a billion dollars.[46] Scholars of the video game industry, such as Mia Consalvo, have demonstrated that Japanese company Nintendo took leadership over the industry after the crash, revitalizing the video game industry as they introduced the NES to the American market in 1985.[47]

In several important ways, the dominance of Nintendo's NES in the U. S. should itself be treated as a new, *technological*, context for video game production and design. This technological context became joined to an important cultural difference as well. Not only did games originating in Japan need translation into American English, but these games also needed material translation to fit into a different technological context. As Consalvo points out, video game companies in Japan often enjoyed marked success in translating their games for non-Japanese markets, where non-Japanese video game companies often faced difficulty entering the Japanese market.[48] Anthropologist Casey O'Donnell observes that Nintendo's business strategies in the United States included the creation of a new machine for the U. S. market. This new machine was equipped with a security chip that the original machine lacked.[49] While numerous cultural and linguistic elements needed translating in the process of remarketing Japanese video games for the United States, technological adaptation was also required of game developers interested in profiting from American audiences. Nintendo required interested developers to reprogram and redesign products so these games would be compatible with entirely new machine.

Adding to this important double translation of technology and language, the NES's 1985 release provided a platform by which some of the most economically successful and most narratively driven

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[46] John Schwartz, "Zap! Zap! Video Games are Back!" *Newsweek,* U. S. Edition, March 14, 1988: 39, Accessed July 16, 2012 through LexisNexis academic.

[47] Mia Consalvo, "Console Video Games and Global Corporations: Creating a Hybrid Culture," *New Media Society,* 8. n. 1 (2006), 117-137. Accessed June 10, 2015, doi: 10.1177/1461444806059921.

[48] Ibid., 124.

[49] Casey O'Donnell, "The Nintendo Entertainment System and the 10NES Chip: Carving the Video Game Industry in Silicon," *Games and Culture,* 6 n. 1 (2011): 83-100. Accessed June 10, 2015, doi: 10.1177/1555412010377319.

video game franchises became popularized in the U. S. The development of new technologies for the U. S. market also meant a transformation of a computer game genre with rules based upon table top role playing games of the 1970s, such as *Dungeons and Dragons*. Game development companies in the West had established the role-playing genre (RPG) on the personal computer and Atari systems.[50] Gradually, RPG games diversified into two subgenres: CRPGs (computer role-playing games) and JRPGs (Japanese-role-playing-games) that sold on the Nintendo and later Sega game consoles. JRPGs "stripped the CRPG to its essence, then added action elements more reminiscent of *Super Mario Bros.*"[51]

Most JRPGs include several important narrative elements. These games often feature digital kingdoms for exploration by the player, as well as a wealth of monsters to fight and non-player characters with which to converse. Colorful non-player characters often populate these digital worlds, and later JRPGs incorporated voice acting and animated scenes to show how these characters interact with playable characters. One of the most prominent features of these games, however, is how game developers constructed linear storylines. JRPGs marked a shift in computer gaming toward an emphasis on telling clear, linear stories that marked a break from the games that came before them. The introduction of JRPGs, marketed and crafted for the popular NES, demonstrates how fantasy storytelling developed, changed, and was adapted for specific technological contexts. A historical analysis of JRPGs can reveal those historical moments when these games *became colorful*, started *incorporating linear narratives*, and therefore became *marketable commodities*.

JRPGs include some of the most wildly popular and economically successful gaming franchises in video game history. Perhaps the most recognizable titles among these games are Square Soft's *Final Fantasy* and Enix's *Dragon Warrior.* Among role-playing games, Square Soft's *Final Fantasy* series

[50] Matt Barton, *Dungeons and Desktops: The History of Computer Role-Playing Games*, (Wellesley, Massachusetts: A. K. Peters, Ltd., 2008), 64.
[51] Ibid., 270.

contained multiple player favorites and an inspiration for future game developers. Created by programmer and eventual Square Soft president Hironobu Sakaguchi, the first game helped keep its company from bankruptcy.[52] During the late 1980s and early 1990s, Square Soft developed a close business relationship with Japanese console company Nintendo Entertainment and expanded on the *Final Fantasy* series for both the SNES and the portable Nintendo system, Game Boy.[53] The success of the *Final Fantasy* series has led to attention from academics, from media critics interested in how the series demonstrates diversity[54] to applications and interpretations from different philosophical perspectives.[55] While Square Soft certainly garnered much of this attention, this dissertation seeks to expand beyond the *Final Fantasy* series in an attempt to better understand the role-playing genre and its storytelling practices by taking into account Square's largest competitor during the late 1980s and early 1990s, Enix Corporation. In fact, *Final Fantasy* arrived late to the Japanese market; *Dragon Quest* had already paved the way. While studies on *Final Fantasy* have certainly proved illuminating, neglecting *Dragon Quest* risks ignoring an important moment of rhetorical history, one that illuminates an important shift in the video game industry in both Japan and the rest of the world.

Accounting for this rhetorical history requires recognizing multiple facets of *Dragon Quest*'s development. These facets of development are best understood as three distinct rhetorical moments: the act of invention, the act of circulation, and the act of engagement with the artifact by audiences. The first of these moments addresses the processes wherein developers created *Dragon Quest*. This period involved the game developers invoking sets of aesthetic and game mechanics and merging them into a

[52] Bill Loguidice and Matt Barton, "Final Fantasy VII (1997): It's Never Final in the World of Fantasy" in *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, 77-92 (Amsterdam, Netherlands: Focal Press, 2009): 77.

[53] Steven L. Kent, *The Ultimate History of Video Games: From Pong to Pokemon and Beyond—The Story Behind the Craze that Touched our Lives and Changed the World* (Roseville, CA: Prima Publishing, 2001).

[54] Gerald Voorhees, "The Character of Difference: Procedurality, Rhetoric, and Roleplaying Games," *Game Studies*, 9 n. 2 (2009). Accessed July 18th, 2012 from http://gamestudies.org/0902/articles/voorhees.

[55] Jason P. Blahuta and Michel S. Beaulieu, *Final Fantasy and Philosophy*, (Hoboken, NJ: John Wiley and Sons, 2009).

new technological form. At this stage of invention, *Dragon Quest* remained unformed, and game developers took previously established cultural conventions and media forms and integrated them into a sellable commodity. Yet another point in which rhetorical decisions became important occurred after *Dragon Quest* entered the marketplace. Once a game had become a commodity, its release to the consuming public places it into a rhetorical moment removed from the context of the artifact's invention. Game distributors utilized parts of the video game, such as images of game play, to assist in its marketing. Eager for profit, these same producers considered the game for multiple markets. As the game moves through these different spaces and takes on different purposes, its nature as a rhetorical artifact also shifted.

The moment when an audience plays the game is a third rhetorical moment. Game designers are faced with an interesting question: how do they create an interactive piece of computer software and use it to tell a story when the audience has a significant ability to alter how the program functions? In *Dragon Quest*, this means game designers direct audiences to perform acts in a particular order. Because narrative unfolding in a video game is contingent upon player actions, this third rhetorical moment calls attention to how the video games medium requires new rhetorical strategies so that players know what actions they can take, when these actions will result in "progressing" in the game, and how their actions lead to specific, in-game consequences. To tell stories effectively, then, the developers of video games must grapple with the innate characteristics of digital technologies and how they allow for the formation of narrative structures.

This dissertation examines each of these rhetorical moments of *Dragon Quest* as different configurations of contingency. I treat each of these moments under different rhetorical terminologies, to demonstrate the different rhetorical processes and design choices that operate at each moment. I survey the moments of invention before *Dragon Quest's* release through the terminological screen of *genre*.

Genre highlights the formative constraints that shape a text, and how these formative constraints become reshaped through technological change. To ascertain how *Dragon Quest* functions rhetorically after its release, I utilize the terminology of *circulation*. Circulation allows recognition for the multiple purposes *Dragon Quest* has as it is sold to the gaming populations of Japan and United States. Finally, understanding the moment where the audience engages *Dragon Quest* directly benefits from thinking about designers construct *narrative*. Understanding the structuring role of storytelling on game play reveals design choices meant to direct players in their exploration and battling of monsters. The narrative elements of a video game emerge when game designers provide understandable ways to navigate and interpret a game world for players that may, or may not, act accordingly. The rhetorical concepts of genre, circulation, and narrative each help expand notions of rhetorical contingency.

By turning to the production of *Dragon Quest* and the technologies that made it possible, this dissertation provides a different historical understanding of rhetorical contingency. For scholars interested in game studies, this dissertation provides a historical example of how game developers infuse a genre of video games with identifiable elements of linear narrative. In addition, this dissertation provides scholars of rhetoric with examples of the rhetorical strategies deployed by storytellers operating within a new technological context. This dissertation also shows how video games as rhetorical artifacts can expand and alter the understanding of genre, circulation, and narrative in new, productive ways. Examining the historical context for *Dragon Quest*, however, requires the development of a research methodology that understands both technology and the process of storytelling in different media forms. Similarly, this methodology must be sensitive to the interrelationships among genre, narrative, circulation and technology. In the following section, I will discuss the research process used to understand these phenomena in detail.

Methods for Interpreting Technological Context

By borrowing from the methodologies used in science and technology studies, I avoid oversimplifying the relationships between technology and humans that characterizes deterministic perspectives on technology, where either technology determines culture or culture determines how technology will be utilized.[56] Borrowing from Bruno Latour, I treat technology and humans as intimately intertwined, where technology "stands in" for human action.[57] As evidenced in the previously cited work of Casey O'Donnell,[58] STS offers interesting, nuanced, and important perspectives on the social processes that create new technologies by closely examining the technologies themselves.[59] In particular, historians of rhetoric and technology benefit from a close attention to technology, as demonstrated in David A. Mindell's detailing of the technologies involved in the Apollo space missions.[60] Mindell effectively creates an archive by drawing upon the recordings of the mission logs that NASA established, discourses within professional piloting journals predating the space missions, and in-depth analysis and contextualizing of interviews with key mission personnel that appeared in the popular press. This collection of diverse materials allows Mindell to show a complex and nuanced picture of the various professional tensions between engineers, pilots, and their conceptualized the role of technology in space flight.[61] Like Mindell, this dissertation examines the technical documents accompanying the NES and Famicom in detail. Technical documents for these systems include patent filings, instruction manuals, licensing agreements, and court cases filed within the U. S. court system over patents and copyright.

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[56] See J. MacGregor Wise, *Exploring Technology and Social Space*, (Thousand Oaks, CA: Sage Publications, 1997).
[57] Bruno Latour, as Jim Johnson, "Mixing Humans and Nonhumans Together: The Sociology of a Door-Closer," *Social Problems*, 35 n. 3 (1988): 298-310. Accessed June 10, 2015, doi: 10.2307/800624.
[58] O'donnell, "The Nintendo Entertainment System and the 10NES Chip"
[59] For other examples of science and technology studies, see Sheila Jasanoff, "The idiom of co-production," in *States of Knowledge: The Co-production of Science and the Social Order*, ed. Sheila Jasanoff, 1-12 (New York: Routledge, 2006). For an anthropological appropriation of STS more closely related to video gaming, see Thomas Malaby, *Making Virtual Worlds: Linden Lab and Second Life* (Ithaca, New York: Cornell University Press, 2009).
[60] David A. Mindell, *Digital Apollo: Human and Machine in Spaceflight* (Cambridge, Massachusetts: The MIT Press, 2008).
[61] Ibid.

Ira Chernus's explanation of the multiple layers of social organizations and technological discourse that gave rise to Dwight Eisenhower's famous speech "Atoms for Peace" also provides a useful methodological framework.[62] Chernus's methodology for tracking the production of Eisenhower's speech involved analyzing key stages of the speech's invention process. Chernus tracked the speech's invention by utilizing reports given by multiple committees and popular accounts regarding the speech's creation process appearing in the press. Extending this methodology to video games provides insight into the multiple organizations involved in the creation and circulation of *Dragon Quest*. Chernus's methodology suggests an important attention to the production of texts that can similarly help in understanding the struggles with the rhetorical properties of a video game. Utilizing Chernus's methodology calls for examining the interwoven social relationships of organizations and committees involved in the creation of these games. Just as Chernus shows how different groups influenced the construction of Eisenhower's speech, I will show how different organizations and their relationships to one another influenced the development of Enix's games.

Science and technology studies (Mindell) and rhetorical studies (Chernus) provide a wide spectrum of objects to analyze. It is important to gain a sense of how the developers and marketers of *Dragon Quest* talked about their efforts to program, sell, and profit from the game. Popular press on video games from this period, namely magazines like *Nintendo Power* and *Electronic Gaming Monthly,* provide important insights into how these game makers thought about the objects they created. Similarly, since many of these magazines operated as early advertisements for these games, these articles can provide important clues as to what developers and marketers thought would be the most important and interesting elements of game play to audiences. Studying how both journalists and the game developers discussed traits of game play and narrative content demonstrates how and why

[62] Ira Chernus, *Eisenhower's Atoms for Peace,* (College Station, Texas: Texas A&M University Press, 2002).

particular changes in the RPG genre occurred. The final element necessary for a complete picture of these games and the RPG genre of this period is a close attention to how *Dragon Quest* actually played. Looking at these games provides an important impression of how the narratives actually came into existence, and will require accessing and playing these games in their originally published forms. Placing game play alongside technical documents and designer discussions appearing in gaming magazines creates a complex picture of how rhetorical practices change over the life of an artifact.

Argument and Chapter Summary

The arguments made in this dissertation will take place over the course of four main chapters, each hinging on the rhetorical development along important rhetorical moments in the life of *Dragon Quest*. In the first chapter, I detail the development of *Dragon Quest* as both continuing and transforming the *genre* of role-playing games. The second chapter charts the movement of *Dragon Quest* as it *circulates* among the U. S. audience as *Dragon Warrior.* The third chapter explores how the NES technology allowed game developers to create a narrative structure. The conclusion addresses how each of the previous chapters helps broaden how rhetorical critics understand the concept of *contingency*. The remainder of this introduction previews the overarching arguments made in each chapter of the dissertation.

The first chapter focuses on the elements of game play, visuals, and game rules that *Dragon Quest* borrowed from Western computer games. Central to this chapter are the historical contingencies that led *Dragon Quest* developers Horii and Nakamura to alter, change, or update game-play mechanics for a new cultural and technological context. Viewing JRPGs through genre provides a way of both organizing these texts and recognizing their shared commonalities. A genre perspective also emphasizes tracing the changes to genre across a time. Thomas Apperley, for instance, argues that generic criticism of games has run up against the multiple ways one could potentially organize games

into genres, including how a game relates generically to one set of games because of visual themes but relate to a completely different set of games because of game rules.[63] Calling attention to three "commercial" categories of genre: action, role-playing games (RPGs), and simulation, Apperley describes RPGs as having derived primarily from fantasy literature and appealing to those experienced with *Dungeons and Dragons*-style tabletop games. Media critic Ewan Kirkland has examined how another genre, "survival horror," took up themes from horror movies and placed players in the role of average protagonists trying to survive against monstrous odds.[64] However, Apperley and Kirkland do not focus on the rhetorical dimensions of genre, and this chapter addresses this gap in the literature by attending to *Dragon Quest* through a rhetorically tinted lens of genre.

Conceptualizing genre as a rhetorical term means examining the relationship between artifacts and the situations in which they arise. Genre scholarship in rhetorical studies provides important ways of understanding the complexity and nuanced interactions between text and technological context that *Dragon Quest* requires. As Karlyn Kohrs Campbell and Kathleen Hall Jamieson argue, genre criticism treats texts as influenced by other texts, and therefore, they repeat similar logical structure.[65] Comparing genres to constellations and cell biology, Campbell and Jamieson explain, "The critic who classifies a rhetorical artifact as generically akin to a class of similar artifacts has identified an undercurrent of history rather than comprehended an act isolated in time."[66] Because of its grouping together of texts across time, genre criticism provides a window into cultural change and provides opportunity for critics to make and defend arguments about discourse as it evolves. By extending this kind of attention to *Dragon Quest* and the technologies that constitute this artifact, we gain a deeper

[63] Thomas H. Apperley, "Genre and Game Studies: Toward a Critical Approach to Video Game Genres," *Simulation and Gaming,* 37 n. 1 (2006): 6-23. Accessed June 10, 2015, doi: 10.1177/1046878105282278.
[64] Kirkland, "Restless dreams in *Silent Hill*," 167-178.
[65] Karlyn Kohrs Campbell and Kathleen Hall Jamieson, "Introduction to Form and Genre," in *Methods of Rhetorical Criticism: A Twentieth-century Perspective*, 3rd edition, eds. Bernard L. Brock et al. (Detroit, Michigan: Wayne State University Press, 1990): 331-342.
[66] Ibid., 341.

understanding of how technology and culture changed the RPG genre as it shifted across market boundaries.

Building upon Campbell and Jamieson, Carolyn Miller argues that genres exist because of reoccurring social situations, and that conceiving of genre as social action, rather than merely a system for naming communication behaviors, brings important insights to rhetorical criticism.[67] The absence of thinking about genre, in Miller's view, means to ignore the normative elements of culture as they act upon reoccurring situations. Miller's understanding of genre "suggests that what we learn when we learn a genre is not just a pattern of forms or even a method of achieving our own ends."[68] To Miller, "We learn to understand better the situations in which we find ourselves and the potentials for failure and success in acting together."[69] While *Dragon Quest* adopts the elements of fantasy literature and tabletop games, these generic elements needed reconfiguration in order for audiences recognize and understand them as fantasy stories.

The role of technology can be particularly important to genre development. Jim Sterling, an author for Destructoid, a popular video game website, argues that the technological shifts to high definition graphics and smooth controls meant some genres became commercially unviable. The survival horror genre, for instance, relied on awkward controls and poor camera angles to boost the horror experience for players, would inevitably end up abandoned by mainstream developers.[70] Media scholars Marika Lüders, Lin Prøitz, and Terje Rasmussen link genre and technology more specifically.[71] These theorists assert that "Genres emerge or adapt where digital technologies and

[67] Carolyn R. Miller, "Genre as Social Action," *Quarterly Journal of Speech*, 70 n. 2 (1984): 151-167. Accessed June 10, 2015, through ERIC, EBSCO*host*.
[68] Ibid., 165.
[69] Ibid.
[70] Jim Sterling, "How Survival Horror Evolved itself into Extinction" *Destructiod*, December 8, 2008. Accessed April 28, 2012 from http://www.destructoid.com/how-survival-horror-evolved-itself-into-extinction-114022.phtml.
[71] Marika Lüders, Lin Prøitz and Terje Rasmussen, "Emerging Personal Media Genres," *New Media Society,* 12 n. 6 (2010): 947-963. Accessed June 10, 2015, doi: 10.1177/1461444809352203.10.

society, or the media and the message, meet in the dimension of time."[72] Fully understanding the ways stories appear in *Dragon Quest* requires attending to the technological modes of visual and sonic representation available in the Nintendo Famicom and the role that images, sound, and game mechanics play in constituting genre. This chapter emphasizes the intermixing between technological and cultural elements present during *Dragon Quest's* invention, and in turn, the decisions that shaped this game would, in turn, inspire the creation of a new subgenre of RPGs.

In the second chapter, I address how the rhetorical role of *Dragon Quest* changed once it became a commercial success in Japan. This chapter examines how a video game's images perform in the contexts of business and marketing and the strange historical contingencies that would lead *Dragon Quest* to economically fail in the United States. Attending to the keyword "circulation," this chapter examines the barriers and difficulties faced by game producers as they released *Dragon Quest* into a new commercial space. As Michael Warner argues, circulation "accounts for the way a public seems both internal and external to discourse, both notional and material."[73] Developed in relationship to study of the public sphere, circulation offers a view of communication that traces flow and movement of an artifact through multiple spaces and among different audiences. Warner argues that "The temporality of circulation is not continuous or indefinite; it is punctual. There are distinct moments and rhythms, from which distance in time can be measured."[74] Like genre, circulation offers a view of temporality. Time is a central component of rhetorical circulation. However, circulation differs from genre in that genre emphasizes structural and aesthetic similarities across groups of texts, where circulation looks at the pathways of movement that an artifact takes as it encounters different audiences.

[72] Ibid., 950.
[73] Michael Warner, *Publics and Counterpublics*, (Brooklyn, New York: Zone Books, 2002), 91.
[74] Ibid., 95.

Circulation offers multiple advantageous points from which to view video games. As Cara Finnegan and Jiyeon Kang argue, circulation can assist rhetorical scholars in discussing the visual quality of rhetoric without succumbing to hostile positions against imagery, what they label as "iconoclasm."[75] Circulation, in Finnegan and Kang's understanding, moves discussions of visual rhetoric beyond the veracity of an image to how the image moves from iteration to iteration. Building on Finnegan and Kang, rhetorical critic Lester C. Olson notes that circulation also allows rhetorical critics to attend to ways an image changes in the circulation process.[76] By charting the subtle changes in a series of images printed in the 1770's, Olson presents how multiple publics, separated by both time and space, make use of similar visual motifs. These publics alter these motifs so they correspond to new social and political events. Like the images Olson studies, *Dragon Quest* circulates to new audiences, and the creators of this game employ multiple strategies for ensuring that the game circulates in a way that benefits Enix economically. By studying circulation, this chapter shows how the complexity of the international video game market, including Nintendo of America's powerful role as a distributor, reinvents *Dragon Quest* as *Dragon Warrior*. Business contracts, advertising strategies, translation practices, and even the technology itself form a strange alchemy. This mixture of law, culture, and technology allows *Dragon Warrior* to circulate among American youth despite low sales.

Within the third chapter of this dissertation, I turn to "narrative," and begin attending to the specific elements of storytelling as they emerge within *Dragon Warrior*. Narrative theorist David Herman explains how narrative operates as a kind of logic.[77] Many scholars interested in narrative seek to understand the constitutive dimensions of this communication form, or simply put, what are the

[75] Cara A. Finnegan and Jiyeon Kang, "'Sighting' the Public: Iconoclasm and Public Sphere Theory," *Quarterly Journal of Speech*, 90 n. 4 (2004): 377-402. Accessed June 10, 2015, doi: 10.1080/0033563042000302153.
[76] Lester C. Olson, "Pictorial Representations of British America Resisting Rape: Rhetorical Re-Circulation of a Print Series Portraying the Boston Port Bill of 1774," *Rhetoric & Public Affairs*, 12 n. 1 (2009): 1-36.
[77] David Herman, "Introduction," in *The Cambridge Companion to Narrative*, ed. David Herman, (New York: Cambridge University Press, 2007): 3-21.

central characteristics of a narrative. For instance, Seymour Chatman's *Story and Discourse* frames narrative theory as having "no critical axe to grind."[78] He continues, however, articulating that narrative theorists, at least during the late 1970s, would ask "What are the necessary components—and only those—of a narrative?"[79]

As rhetorical critic James Jasinski explains, researchers on narrative typically address one of four research agendas: *defining* what a narrative is, addressing how narratives *function* to complete a rhetor's goals, the *forms* narratives might take, and how should a critic make sense or *evaluate* a specific story.[80] Jasinski's labels of these tasks as definitional, functional, formal, and evaluative each underscore the great diversity of research questions scholars pose. Chapter three examines *Dragon Warrior* as an artifact that co-constructs narrative through numerous rhetorical strategies to direct the player's actions. By addressing the forms that narrative can take in a video game artifact, I argue computer technologies face an important constraint when designers attempt to craft a narrative. The audience's ability to co-author the story and potentially disrupt its progress challenges game designers to think in terms of spatial control to establish linearity. I explain a set of spatial rhetorical strategies—"soft barriers" and "hard barriers." These modes of controlling access to game spaces demonstrate that video game designers have multiple methods of ensuring forms of narrative linearity. Stories in video games emerge through interlocking enthymemes, where a player "fills in" key assumptions within a larger narrative context.

In the fourth and final chapter of this dissertation, I mobilize the arguments present in the first three chapters to highlight the role of materiality in conceptions of narrative, genre and circulation. In this chapter, I show how each of the previous chapters fit together to provide important insights into the

[78] Chatman, *Story and Discourse*, 18.
[79] Ibid., 19.
[80] James Jasinski, "Narrative," In *Sourcebook on Rhetoric: Key Concepts in Rhetorical Studies*, (Thousand Oaks, CA: Sage Publications, 2001).

role of contingency in video game development, interpretation, and distribution. Here, I relate the term "contingency" to elements of the "material." By positioning "contingency" across "materiality," I argue that contingency runs throughout the rhetorical process, from the first inklings of invention until a video game finally stops circulating among a public. This conclusion highlights the role of materiality and contingency in forming genres, circulating discourse, and telling stories.

The arguments made in each chapter help rhetorical scholars and media critics understand the technological and social contingencies that shaped current role-playing games and gaming-culture. Through utilizing aspects of science and technology studies and rhetorical criticism, I offer insight on the historical shifts in technological development that led video games to carry deeper and more culturally recognized social impact. Understanding how narrative developed in earlier role-playing games provides important theoretical and technical insights into how current technologies and generic conventions shape and transform how fantasy is understood and communicated. This dissertation helps recognize the historical moments that shaped game development and how the rhetorical strategies for creating and selling games change. When one considers the creation of more recent video games, such as Bethesda's *Skyrim* or Square Enix's *Final Fantasy XIV*, developers encounter rhetorical constraints with which the game industry has long struggled. Modern video games have transformed many of the rhetorical strategies utilized in the 1980s, and both rhetorical scholars and media critics will find that many recent fantasy games have roots extending the rhetorical strategies deployed within *Dragon Quest*. Attending to the rhetorical history of video games provides insight into the role of technology in changing rhetorical conventions.

CHAPTER ONE

Dragon Quest and the Genre of the Digital Role Playing Games

As Karlyn Kohrs Campbell and Kathleen Hall Jamieson emphasize, the concept of genre points to texts and their interrelationships across historical contexts.[1] Their emphasis on textual histories lends rhetorical scholars a language for discussing where texts evolve. Campbell and Jamieson argue, "Recurrence of a combination of forms into a generically identifiable form over time suggests that certain constants in human action are manifest rhetorically."[2] Carolyn Miller builds upon this notion, arguing that genre has often been described as operating with multiple, differing heuristics, including audience, forms, strategies, and similarities in rhetorical situation.[3] As a result, genre provides rhetorical critics with important analytical tools for understanding the historical development of texts. Miller specifically grounds genre in a set of "social acts," where communicators respond to reoccurring social situations in specified, appropriate ways dictated by convention.

In applying genre criticism to the development of specific video game types, critics can find a rich cultural history spanning both Asia and North America. In this chapter, I argue that the 1986 Japanese video game *Dragon Quest* represents the merging of role-playing game mechanics with the aesthetics of Japanese manga comics and commercial audio, leading to the emergence of a new video game genre called Japanese Role Playing Games (JRPG). Examining *Dragon Quest* through the lens of genre theory illustrates a rich historical moment. At the same time, *Dragon Quest* also challenges rhetorical critics to recognize how changes in a medium imposed new constraints on genre development. Technological changes instigated by Japanese company Nintendo created new pressures to improve the use of sound and visuals in video games. *Dragon Quest* successfully navigated these

[1] Karlyn Kohrs Campbell and Kathleen Hall Jamieson, "Introduction to Form and Genre," in *Methods of Rhetorical Criticism*, 3rd edition, eds. Bernard L. Brock, et al. (Detroit, Michigan: Wayne State University Press, 1990): 331-342.
[2] Ibid., 341.
[3] Carolyn R. Miller, "Genre as Social Action," *Quarterly Journal of Speech*, 70 n. 2 (1984): 151-167. Accessed June 10, 2015, through ERIC, EBSCO*host*.

technological pressures through incorporating visual and sonic forms in ways that complemented the game mechanics present in previous Western games, *Wizardry* and *Ultima*. The push toward increased visual and sonic quality did not come from Enix or Squaresoft, but from the design goals of an old Japanese entertainment company, Nintendo. Nintendo had far more influence over the emerging JRPG genre than just accounting for *Dragon Quest's* antecedent qualities in *Wizardry* and *Ultima* could reveal. Accounting for *Dragon Quest*'s emergence as an artifact requires attending not only to the traits it inherited from its generic parents, but also to the traits Yuji Horii and Koichi Nakamura needed assistance inventing—namely the improved visuals and use of music. This chapter concludes by arguing that the economic dimension of social action motivate many of the rhetorical decisions made by developers and producers.

Miller argues that understanding genre helps relate multiple texts and their historical links to one another.[4] In this conception of genre, the importance of the term relates specifically to diachronic attention to genre change. Rhetorical theorist Susan Wells argues that this historical emphasis directly relates to conceptualizing of genre in biological terms. She explains, "Whenever it is invoked, the evolutionary framework orients us to seeing genres temporally, as objects that move through time, that have their own histories."[5] Wells, however, cautions rhetorical critics who rely on biological metaphors for discussing genre, arguing that this terminology can "obscure genre relations that are complex or contradictory and overlooks the possibilities of texts generating readers and practices of reading."[6] Following the development of a genre, then, requires a critic to keep in mind the complex and contradictory as well as the formal, recursive, and situational. Wells asks rhetorical critics to consider genre along spatial terms, which reveals moments where an artifact invokes the conventions of multiple

[4] Ibid.
[5] Susan Wells, "Genres as Species and Spaces: Literary and Rhetorical Genre in *The Anatomy of Melancholy," Philosophy and rhetoric*, 47 n. 2 (2014): 115. Accessed June 11, 2015, doi: 10.5325/philrhet.47.2.0113
[6] Ibid.

genres.[7] For Wells, spatial metaphors emphasize how authors *situate* readers in relationship to text and other genres."[8] Spatiality assists rhetorical critics in recognizing how elements of a text or artifact can potentially draw upon multiple genre sources, and thereby use those characteristics to comment upon or alter how a reader experiences the object. Spatial metaphors also provide access to the multiple sensory elements of an artifact, as new technologies might require rhetors to incorporate new communication modes into already established genres.[9]

Dragon Quest builds upon previously published and successful game franchises *Wizardry* and *Ultima,* two popular games for American-made personal computers. *Dragon Quest's* creators, Yuji Horii and Koichi Nakamura, transported an already existing genre into a new cultural and technological context. This is not to say, however, that accounting for genre's history or use of elements is not important. Analyzing both the spatial and textual interplays of an artifact and accounting for the historical evolution of these traits across multiple artifacts matters. As Risa Applegarth explains, "examining genre change as ecological change, relying on language drawn from evolutionary theory, can have the inadvertent effect of naturalizing the social and communicative processes that genre scholars investigate."[10] Applegarth emphasizes an economic metaphor for understanding genre. She offers the phrase "rhetorical scarcity," is "meant to evoke not only biological ecosystems but also

[7] Wells turns to Robert Burton's *The Anatomy of Melancholy* to demonstrate this terminology's utility. Through analysis of Burton's work, Wells articulates a theory of genre that attempts to account for the book's incorporation of numerous generic qualities that resist historical analysis. She argues that historical accounts of genre theory attempt to label works with stable generic identities. While this works for texts or artifacts with clear, singular purposes, when authors and speakers begin mingling unfamiliar forms together, the resulting artifact resists categorization. Approaching through a temporal metaphor of genre limits the ability of rhetorical scholars to question the object analyzed.

[8] For Wells, a spatial approach to genre helps articulate how *The Anatomy of Melancholy* operated as "a layered territory that draws on and shapes readers' expectations. It is not a text without genre; it is a text of multiple overlaid genres, a text about genres." Ibid., 131.

[9] The history of media is replete with these kinds of examples. Cinema eventually includes sounds within the movie theater, which are affectionately referred to as "talkies." Recorded songs come to be shown with images and the "music video" is born. Changes in technology often mean new senses might be added to established genres. As the rest of the chapter will show, video games too experience a moment where additional senses can be incorporated into the design of individual games.

[10] Risa Applegarth, "Rhetorical Scarcity: Spatial and Economic Inflections on Genre Change" *College Composition and Communication*, 63 n. 3 (2012): 454. Accessed June 11, 2015 through ERIC, EBSCO*host*.

unnatural, power-saturated inflections drawn from the register of economics."[11] Emphasizing rhetorical scarcity recognizes the important of technological advances for understanding genre changes. This terminology, unlike evolutionary or spatial metaphors for understanding genre, highlights the economic pressures created by Nintendo that, in turn, shaped the development of *Dragon Quest*.

This chapter begins by first clarifying some of the terminological murkiness around the term "RPG." In this first section, I describe distinctions among role playing games (RPG), Western computer role play games (CRPG), and Japanese Role Playing Games (JRPG) and how these terms historically emerge. These commercial terms offer a concrete distinction between different configurations of game playing that emerged in the 1970s and 1980s. After explaining these categories, I discuss the conventions *Dragon Quest* borrowed from the CRPGs that were popular in the United States. This section establishes some of the common aesthetic and game play conventions that characterized the CRPG genre of games, while articulating how these games incorporated the visual conventions of maps to establish game play. *Dragon Quest* adopts several of these map conventions directly from Wizardry and Ultima, but its subtle changing of these forms directs the JRPG genre toward a different overall aesthetic.

The third section of this chapter examines the technological context in which *Dragon Quest* was made. Here, I highlight the economic motives that drove design decisions made by Horii and Nakamura and explain the role that Nintendo, a Japanese company that produced video game hardware, had on the development process. This includes a detailed account of how Nintendo's Famicom (short for "family computer") game console created a moment of rhetorical scarcity. The invention of the Famicom, I argue, pushed game designers to spend more time developing the visuals for their games. At the same time, the Famicom also created an impetus for game designers to take the score of games

[11] Ibid., 455.

more seriously.

The Historical Emergence of Role-Playing Games on Computers

The formative years of role-playing games were a period of terminological murkiness; text-based games flourished for home computer systems and action games ruled the arcades. Writers for game magazines struggled with developing a concise nomenclature for describing new games and how they related to previous ones. These authors wrote with the purpose of showing potential customers that they might like (or dislike) a game that featured the characteristics of previously established games. *Wizardry* and *Ultima*, two important contributors to *Dragon Warrior*'s aesthetics, emerged in the early 1980s and writers used the characteristics of these two games to define a separate genre of gaming from previously established genres. A complete picture of *Dragon Quest's* relationship to genre requires recovering this history and relating it to the mechanics of non-digital role-playing games.

"Role-playing" games received their moniker from the mechanics and flavor of the American tabletop game *Dungeons and Dragons*. These games relied on numerical attributes applied to different traits of a character, such as the ability of a character to make quick, precise movements being labeled as dexterity or the ability to endure physical pain being labeled as constitution.[12] In these kinds of games, characters have a numerical value assigned to these labels, and the higher the number, the better they are at that type of skill. The concept of "leveling up" a character comes directly from the core gameplay mechanics of *Dungeons and Dragons*. An RPG, in this view, has in-game characters that evolve statistically, and instead of the character merely gaining new items, player-controlled characters evolve and change. For example, a character might improve their "strength score" through battling multiple monsters in an RPG, but in other types of games, the character's strength remains static

[12] Matt Barton, *Dungeons and Desktops: The History of Computer Role-Playing Games,* (Wellesey, Massachusetts: A. K. Peters, Ltd. 2008), 7.

regardless of how many battles they fought.[13] Traditionally, games with this leveling up mechanic are linked generically, as leveling up is a defining feature of this genre. However, the RPG genre is broad and includes any game with this type of mechanic, whether that game is digital or tabletop, or has highly evolved graphics or simple block figures. Thus, many individuals in the video game industry adopt the term Western computer role-playing games (CRPG) to distinguish the games developed in the computer gaming industry of the early 1980s from table-top games.

When game developers first begin incorporating the level-up mechanic in video games, text-based adventure games were already popular, and many writers in the gaming industry faced difficulty explaining the similarities and differences between the two types of games. The video game industry first began parsing the terms "role-playing games" and "adventure" games in the context of advertisements and game reviews in gaming magazines. "Adventure" games, as a category, derived game mechanics from Will Crowther and Don Woods's mid-1970s text-based computer game *Adventure*.[14] *Adventure* required players to input text commands such as "move north" or "take sword." This game provided players with a digital environment communicated entirely through textual description. The text-based games that followed *Adventure* emphasized solving puzzles by entering text. Entering text commands in later games mirrored the original game and earned the entire genre the moniker "adventure."[15] To add to the confusion, adventure genre games and role-playing games initially shared fantasy and science fiction settings.[16] The genres of "RPG" and "adventure" remained similar to one another in terms of narrative setting or elements of plot. For instance, several early

[13] The earliest of these CRPGs played on large college campus servers and were lost to history when college administrators had them deleted. See Barton, *Dungeons and Desktops*.
[14] Ken Rose, "Origins of the Adventure," *Softline,* 1 n. 2 (1981), 6-8. Accessed April 3, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.
[15] Barton, *Dungeons and Desktops,* 6.
[16] Ibid.

adventure and early RPGs were centered on the defeat of an evil wizard.[17] However, games in the adventure genre lacked the leveling system that characterized CRPGs.

While tabletop role-playing involved heavy socializing between players, CRPGs of this period deemphasized these social elements. Several prominent members of the computer gaming community called attention to these differences between tabletop and computerized play. As described in a 1982 *Computer Gaming World* article, for role-playing games in the 1980s, "player interaction remains restricted due to the solitaire nature of play. But, outside of game play, it is dramatic experiences which are interchanged among players. The human connection is much stronger in this case, as each player edits and revises the game experience until it exists as much in his/her individual imagination as on the video screen."[18] These games allowed players to experience the game play of a tabletop game, in terms of fighting mythical creatures and exploring new worlds, without the necessity of a peer group with which to organize schedules, coordinate action, or otherwise communicate.

Reviewers often drew distinctions between CRPGs and the popular games in arcades. David and Sandy Small, for instance, claim CRPGs were "super-sophisticated 'Dungeon' games for home computers" that differed significantly from arcade style games because of the permanency of characters.[19] While popular arcade games of the time might have players taking the roles of spaceships or single characters that navigate around enemies, these arcade and adventure games did not record how the characters changed from one play session to another. Small and Small explain to readers that this "character save" feature descended directly from the paper and pen style of *Dungeons & Dragons*, where players recorded the experiences of their character on sheets of paper to track their progress. For

[17] Ibid. Barton compares the plots of the text-based adventure *Zork II* and the computer role-playing game *Wizardry*, both of which focus on fighting an evil magician.
[18] David Myers, "Atari: Exploiting the Human Connection," *Computer Gaming World*, 2 n. 5 (1982): 15. Accessed on March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=2&id=500.
[19] David Small and Sandy Small, "Computer Games '82: DnD," *JoyStik,* 1 n. 1 (September 1982): 59. Accessed April 21, 2013 from https://archive.org/details/joystik_magazine.

adventure and arcade games, saving characters independent of in-game progress was unnecessary. These reviewers' observation also cements, for both readers and players, the relationship CRPGs have to *Dungeon and Dragons* leveling-up.

Discourse in the 1980s shows a gradual separation from CRPGs and text-based adventures. At first, writers often mentioned CRPGS as a subtype of adventure game. In an early review of *Ultima*, for instance, John Williams claimed, "Adventure games can be classified into two major categories: those that involve solving a puzzle, and those that involve fantasy and role-playing."[20] An introductory article in the first issue of *JoyStik*, however, compared role-playing games to acting within a movie, where players control the action rather than actors.[21] Advertisements for several CRPGs emphasized elements of exploration. The 1982 *Ultima II* for the Apple II by Sierra-Online had science fiction and fantasy elements, allowing players to both travel through time and to new planets.[22] Advertisements for this game boldly claimed that it could give players months of enjoyable content and a huge game-space to explore.[23]

Reviewers of adventure games and CRPGs also distinguished between the two genres. Reviewing Marc Blank and David Lebling's *Zork*, Ken Rose examined the role of parsers, or word-separators, in the first text-based game, *Adventure.*[24] Writing in 1982, Rose explained that adventure games incorporated simple graphics instead of relying on textual description. Rose went further, claiming that eventually computers would allow for moving images of characters and monsters, thereby

[20] John Williams, "*Ultima,*" *Softline,* 1 n. 1 (1981): 18. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.
[21] Small and Small, "Computer Games '82: DnD," 56-57.
[22] James A. McPherson, "ULTIMA II: A Review," *Computer Gaming World,* 3 n. 2 (1983): 23, 55. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.
[23] Sierra On-line "Ultima II Advertisement," *Computer Gaming World,* 3 n. 2 (1983): 24. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.
[24] Ken Rose, "Adventures in Adventuring: Please Parse the Zork," *Softline,* 1 n. 4 (1982): 14-17. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=6&id=500.

increasing the appeal of adventure games.[25] Central to Rose's review is the importance of language in the exploration of these text-worlds. Players typed directions to a character that remained unseen throughout the game. The lack of visuals, in Rose's view, limited interest in this genre, particularly as game designers had recently begun emphasizing visual elements of their games.

Images in advertisements for these games, however, ran rampant. For example, text-based adventure games like Bob Davis and Ken William's *Ulysses* featured full color illustrations of a mythical Greek figure riding a white winged horse and holding a golden fleece.[26] Some adventure games sought to move beyond written descriptions, such as *The Wizard and the Princess*, which boasted "hundreds of hi-res pictures."[27] Not all companies embraced arguments about images to sell their games, however. Advertisements for Infocom's *Zork II* emphasized features like "the largest vocabulary" for entering commands and "most intriguing plot in the genre."[28] *Zork III* advertising showed a different strategy that emphasized the role of imagination. In two-page spreads appearing in the game magazine *Softline*, Infocom claimed they "Unleash[ed] the world's most powerful graphics technology" by refusing to put "graffiti" into their games.[29] The advertisement implied that the player's imagination would prove far superior to any graphics on a computer monitor.

This early history of CRPGs showed a gradual recognition that *Wizardry* and *Ultima* differed from games like *Zork* and *Adventure*. Horii and Nakamura's work in *Dragon Quest*, however, marked a new kind of RPG, distinctly recognized because of its geographic origin, graphics, and linear

[25] Rose, "Origins of the Adventure," 6-8.
[26] On-line Systems, advertisement, *Softline*, 1 n. 2 (1981): 13. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500; On-line Systems, advertisement, *Softline*, 1 n. 3 (1981): 14. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500. This ad image typically was placed next to images for other text adventures. The image appeared by itself in *Softline*, 1 n. 1 (1981): 1.
[27] On-line Systems, "Hi-Res Adventure" *Softline* 1 n. 1 (1981): 16. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.
[28] "Just when you thought it was safe to go back underground again," *Softline*, 1 n. 4 (1982): 60. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=6&id=500.
[29] Infocom, "We Unleash the World's Most Powerful Graphics Technology," *Softline*, 3 n. 1 (1983): 6-7. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=6&id=500.

storytelling. This genre, named Japanese Role-Playing Games (JRPGs) comes into being primarily through introduction of CRPG game mechanics to the Japanese public. The first introduction of these mechanics occurred through a game called *Black Onyx*, created by Bullet-Proof Software, which was founded by an expatriate named Henk Rogers.[30] Rogers noticed that the Japanese computer game market had a diverse selection of genres, but did not have games similar to popular CRPGs in the U.S. In an attempt to expose Japan to *Dungeons and Dragons* style games, Rogers created *The Black Onyx* for the Japanese personal computers.[31] Although initial sales were dismal, Rogers eventually hired an interpreter and went from game magazine to game magazine explaining the concept of Western RPGs to video game journalists. By April of 1984, sales turned around dramatically, and native Japanese designers, including successful Enix game designer Yuji Horii, began making their own role-playing games shortly after *Black Onyx's* release.[32]

Dragon Quest is a definitive origin for the JRPG genre, at least when it comes to how the game industry describes the genre.[33] Similarly, in spite of *Black Onyx's* moderate success, evidence suggests that games like *Wizardry* and *Ultima* had a larger influence over *Dragon Warrior's* creators.[34] Initial reception to *Dragon Quest's* 1986 release was anemic. However, Horii utilized his connection with *Shonen Jump* to write articles about the game and thereby explain it to the magazine's large

[30] Tristan Donovan, *Replay: The History of Video Games*, (East Sussex, England: Yellow Ant, 2010): 159.
[31] Ibid., 160.
[32] Ibid., 161.
[33] See, for instance, Kurt Kalata, "A Japanese RPG Primer: The Essential 20," *Gamasutra*, March 19, 2008. Accessed March 26, 2015 from http://www.gamasutra.com/view/feature/131985/a_japanese_rpg_primer_the_.php; Jason Schreier, "Why Do People Care About JRPGs?" *Kotaku*, June 29, 2012. Accessed March 26, 2015 from http://kotaku.com/5921080/why-do-people-care-about-jrpgs; Colin Moriarty, "Are JRPGs Primed for a Comeback?" *IGN*, February 2, 2015. Accessed March 26, 2015 from http://www.ign.com/articles/2015/02/02/are-jrpgs-primed-for-a-comeback.
[34] The argument that Wizardry and Ultima influenced *Dragon Quest's* development comes mainly from interviews with producers Nakamura and Horii. See Tom Goldman, "*Dragon Quest's* JRPG Mascot Inspired by Western RPG," *The Escapist*, July 9, 2010. Accessed March 26, 2015 from http://www.escapistmagazine.com/news/view/101991-Dragon-Quests-JRPG-Mascot-Inspired-By-Western-RPG; Jeremy Parish, "Koichi Nakamura Interview: On the Birth of the Console RPG," *1Up.com*, August 7, 2010. Accessed March 26, 2015 from http://www2.1up.com/features/koichi-nakamura-interview-console-rpg.

readership.[35] Like its CRPG predecessors, *Dragon Quest* required explanation before it could commercially succeed with its audience.

Genre, as Carolyn Miller points out, routinely develops in relationship to the rhetorical situation confronting would-be authors, speakers, or in the case of CRPGs, game-designers and advertisers, and is product of these rhetorical situations.[36] Miller argues that genre, as a form of classification, should "be limited to a particular type of discourse classification, a classification based in rhetorical practice and consequently open rather than closed and organized around situated actions."[37] This emphasis on the pragmatic leads Miller to emphasize the everyday use of communication categories as informative about knowledge production. The process for genre development, in Miller's view, comes from the application of a stock knowledge rising from previously experienced rhetorical situations. The rhetor classifies a new experience based on the similarities with previous situations, responds to this classification through a set of rhetorical actions, and these actions become a rhetorical "type."[38] Miller's observations easily apply to the gradual distinction of CRPGs from adventure games in the advertising and review articles written by game industry insiders in the 1980s. One can infer from these distinctions a change in the rhetorical situation in which these professional game developers wrote. Advertising and game reviews were a context where writers discerned what generic conventions would influence audiences to purchase games. Therefore, when these writers drew distinctions between the adventure genre and the CRPG genre, they access a need to show customers what makes these game types different from one another, and therefore, what makes them desirable for audiences.

Provided the rhetor's types remain adequate and the new experience has enough similarities to previous ones, a new genre will not necessarily develop. However, when these new experiences defy

[35] Chris Kohler, *Power Up: How Japanese Video Games Gave the World an Extra Life*, (Indianapolis, IN: Brady Games, 2004), 84.
[36] Miller, "Genre as Social Action," 153.
[37] Ibid., 155.
[38] Ibid., 157.

analogous relationships to previous situations, people develop a new genre to handle the communicative burdens associated with the new situation. For Miller, the use of categories to distinguish types of communication from others develops not from the material properties of the world, but the exigencies culled from social experience.[39] Miller explains, "Exigence must be located in the social world, neither in a private perception nor in material circumstance….The exigence provides the rhetor with a socially recognizable way to make his or her intentions known. It provides an occasion, and thus a form, for making public our private versions of things."[40] The exigencies that give rise to new genres require acknowledging these changes to the rhetorical situations. Advertisers and reviewers paint the picture of CRPG evolving dually from *Dungeons and Dragons* and the adventure genre simultaneously, but the adventure genre seems to only have a faint resemblance to the CRPGs *Wizardry* and *Ultima*, as both games provided players with visuals, instead of text, in the exploration of their worlds. Explanations of these games in the reviews and advertising highlight differences in mechanics, but not necessarily the visual nature of the games. When visuals are mentioned, a few developers rejected visual improvements, such as the case with Infocom and their *Zork* series. Most other developers, however, embraced movement within the industry toward greater emphasis on images.

The emphasis on visuals and game mechanics warrant further analysis, as accounting for *Dragon Quest's* place in history also requires addressing the sensory components of actual game play. This section of the chapter helped frame genre development of CRPGs as a commercial enterprise, where the key differences between CRPGs and adventure games can be understood through elements of game mechanics. Recognizing the differences between JRPGs and CRPGs, however, will require a deeper analysis that compares *Dragon Quest* to the games that directly inspired its creators. The next section of this chapter discusses these games in greater historical detail, emphasizing what these games

[39] Ibid.
[40] Ibid., 158.

looked like and how they contributed to *Dragon Quest* both visually and in terms of game mechanics.

Early CRPGs and their Influence on *Dragon Quest*

The key features of the role-playing genre, including the aesthetic qualities of visually exploring a fantasy world, the ability to fight monsters, and gaining powers through the process of "leveling up" are central to *Dragon Quest*. The reoccurrence of these elements points to a rhetorical redeployment by Horii and Nakamura. Game designers Horii and Nakamura borrowed heavily from both *Wizardry* and *Ultima.* The choices made in this game design process would have lasting impacts on the JRPG games made for many years. Where the previous section of the chapter emphasized the discourse around early CRPGs, this section of the chapter attends more closely to the way visuals and game rules construct the experience of these games for the audience. Attending to these visuals and game mechanics establishes a generic link between *Dragon Quest* and the U. S. games *Wizardry* and *Ultima*. However, closer attention to visuals and game mechanics also highlight important differences, including traits of CRPG's that Horii and Nakamura chose to discard.

Richard Garriott, creator of *Ultima*, created the game's visual predecessor *Akalabeth* while working in a small computer store in Texas.[41] Heavily influenced by his own playing of *Dungeons and Dragons*, Garriott spent his high school career designing fantasy games on a school computer.[42] Garriott represented the vast world of *Ultima* by giving players an overhead view of the characters and settings when the player moved characters in town or world spaces.[43] Players controlled a single knight, depicted as a small human-shaped icon with a shield and sword. Movement of the character did not change its orientation, however, and it permanently faced the player when visually represented.

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[41] Barton, *Dungeons and Desktops*, 58.
[42] "Inside Ultima IV," *Computer Gaming World*, n. 26 (1986), 18-21. Accessed June 11, 2015 from http://www.cgwmuseum.org/galleries/index.php?year=1986&pub=2&id=500.
[43] Bill Loguidice and Matt Barton, "*Ultima* (1980): The Immaculate Conception of the Computer Role-Playing Game," *Vintage Games An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, 335-52 (Amsterdam, Nederthlands: Focal Press, 2009): 335-337.

When exploring, players moved across a black spotted area representing grasslands. Small white fortress-like buildings and tiny white castles with a single flag atop them marked small pockets of civilization. Bodies of water took the form of a series of blue parallel lines running from diagonally downward from the top left of the screen. Mountains were a series of white lines with 90-degree angles pointing upward and bright green circles comprised forests. While inside dungeons, however, *Ultima* shifted to a first person perspective comprised of white wire-frames.

Robert Werdna and Norman Sirotek's 1981 creation *Wizardry* influenced future CRPGs by allowing players to create parties of multiple characters for adventuring.[44] Like *Ultima*, *Wizardry* was immensely popular. Mark Marlow's review in *Computer Gaming World* praised the game as setting "the standard by which all fantasy role playing games should be compared."[45] *Wizardry* featured a single dungeon, where players entered "The Maze," and descended ten floors to fight an evil wizard. Both *Ultima* and *Wizardry* presented players with dungeons in first-person perspective. While *Ultima* presented players with a larger world to explore, *Wizardry* focused most exploration within the dungeon, and included instructions on how to create maps for it. While exploring the world, *Ultima* allowed players to attack enemies, but while in dungeons, monsters attacked players while they explored. The first-person perspective of dungeons provided enemies with the ability to surprise the player. *Wizardry* featured random battle encounters, where an image of enemy monsters interrupted exploration of the dungeon. Commands appeared alongside the number of those monsters, and a turn-based battle would ensue. While *Ultima* had players type in individual commands for movement and attacking, *Wizardry* utilized a spell system where mages and priests needed to type the spell name in order to cast it.

[44] Ibid.
[45] Mark Marlow, "Wizardry: The Proving Grounds of the Mad Overlord, A Review," *Computer Gaming World*, 2 n. 3 (1982), 6-8, Accessed on March 30, 2013 from Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=2&id=500.

Visual Elements of *Dragon Quest*

For *Dragon Quest*, Horii and Nakamura deployed aesthetic qualities similar to *Ultima* and *Wizardry* in several ways. In terms of world exploration, both *Dragon Quest* and *Dragon Warrior* place the player's perspective looking down upon the game world. The players begin the game in a central castle where a controllable character stands before a king. The king, named Lorick, explains to the player the purpose of their quest. After opening several chests, which contain items, and talking to a few soldiers, players leave the throne room and find themselves in a large castle courtyard. These scenes take shape through a series of repeated block patterns. For instance, in Lorick's throne room, the screen shows the throne as a set of five yellow blocks arranged as an inverted "U." The floor of the room is a red brick pattern, and walls are represented by grey stone blocks with small cracks in them. A grid pattern of dark and medium grey shapes arranged on a lighter grey background surrounds the throne room and represents the lower floor of the castle's roof. Instead of inputting commands for character movement by typing the direction, *Dragon Warrior* and *Dragon Quest* both utilized the directional keypad of the Nintendo Entertainment System's and Nintendo Famicom's control pads, respectively. Like *Ultima* before it, the player's character in *Dragon Quest* appears looking up, through the screen, at the player, even when this character moves in other directions. This arrangement of character-in-space required players to enter a cardinal direction when entering commands like "talk," "search" or "open." Non-player characters also continuously faced the player, and thus any character's bodily orientation did not vary.

Borrowing generically from *Ultima Dragon Quest*'s reliance on an overhead perspective, invokes the rhetorical form of maps. As Stefan Ekman points out, maps have long been associated with high fantasy literature.[46] Maps are also intrinsically ideological forms of visual communication, and

[46] Stefan Ekman, *Here Be Dragons: Exploring Fantasy Maps and Settings* (Middletown, Connecticut: Wesleyan University

therefore they privilege particular viewpoints and understandings of the world.[47] Maps in relationship to fantasy worlds function differently than maps used to demarcate real places. Ekman explains that the use of maps in fantasy literature can "blur the distinction between representation and imagination, suggesting that the places portrayed are in fact representations of existing places."[48] Ekman argues that a fantasy map works to represent to the audience a world of the author's creation. However, Ekman also identifies the potential for fantasy maps to function as a "doceme," where it becomes a "part of the total fantasy document."[49] Treating fantasy maps as a doceme frames them as an important part of the writing process that helps the author create the fictional world for the audience.

For *Dragon Quest*, the player's viewpoint is an overhead vantage point, but the representation of landforms and buildings is communicated through abstract symbols representing geographic land forms. Mountains and hills are presented in profile, rather than how they might look if literally examined from above. Forests, too, are presented as a pair of trees, echoing the use of three round circles to represent forests in *Ultima*. Both player and non-player characters were displayed in profile. Presenting space through the visual language of maps in both *Ultima* and *Dragon Quest* allows the game designers important strategies to direct player behavior.[50] For instance, presenting the character as moving on a map presents the designer with the ability to present geographic diversity and provide players with an aerial view that overcomes the limitations of first-person perspectives. In *Dragon Quest*, this often occurs when players can view two different sides of a river at the same time, or where the player can see what resides on the other side of a wall. *Dragon Warrior* and *Dragon Quest* deviated

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Press, 2013): 1-20.

[47] Ben F. Barton and Marthalee S. Barton, "Ideology and the Map: Toward a Postmodern Visual Design Practice," in *Central Works in Technical Communication*, eds. Johnson-Eilola, J. and Selber, S. A., 232-252 (New York, New York: Oxford University Press, 2004): 232-235.

[48] Ekman, *Here Be Dragons*, 21.

[49] Ibid.

[50] I will address some of these strategies in more detail in Chapter 3, but for now it is important to recognize how these visual strategies operate aesthetically.

from their predecessors in the methods for depicting dungeon exploration. Rather than move to first-person perspective, Horii and Nakamura kept the overhead perspective of world and town areas. Additionally, *Dragon Quest* introduced a game mechanic where players needed torches or a magic spells to light dungeons. A player without a torch or without the "radiant" spell faced an extremely limited range of vision within dungeons. By comparison, dungeon hallways in *Wizardry* and *Ultima* are bounded spaces and players cannot see what lies on the other side of these walls because they are presented as opaque obstructions. In *Dragon Quest*, the radiant light of a spell could extend beyond dungeon walls, thereby partially illuminating the light in hallways that ran parallel to the hall in which the player's character stood.

Ben F. Barton and Marthalee S. Barton explain that maps also privilege particular viewpoints through the hierarchical relationships between representations of space. They argue that "the placement of visual elements becomes a way of imparting privilege."[51] The ideology at play here corresponds to the privileging of particular elements of story. Representing objects as in the first person perspective in dungeons, the way *Wizardry* and *Ultima* do, privileges the firsthand experience of exploration and brackets the identity of the player. Instead of representing the player directly, the player remains visually undefined by the game. However, when representing game spaces as a map, visualization of the character becomes paramount. Players need the visual representation of the character in order to navigate spaces when confronted with the perspective of a map, whereas first-person perspectives skirt this need.

The way maps center and prioritize the visualization of characters becomes much more salient when *Dragon Quest* was finally translated to North America in 1989. The privileging of character became much more intense, as designers updated graphics of the game and incorporated new images to

[51] Barton and Barton, "Ideology and the Map," 236.

represent in-game characters. While the same general patterns used for trees and water appeared in the newer version, characters took new forms. For instance, in *Dragon Quest*, King Lorick's depiction remains unrefined, and only a mustache and set of eyes adorn his face. However, in *Dragon Warrior*, Lorick had tiny arms and carried a scepter. Soldiers wore horned helmets and carried small spears in *Dragon Quest*, while the same soldiers in *Dragon Warrior* had rounded helmets and a shield. In addition, characters faced multiple directions and had animated motions, and the designers simplified the interface by executing player commands in the direction the character faced. Further, with the delayed release in the U.S., not only were *Dragon Warrior's* graphics updated with newer sprites for characters, the game also made use of a battery save-game feature, which let U.S. audiences take breaks from game play without entering complicated alpha-numeric passwords to save their game progress.[52] These changes emphasized non-player characters even further, augmenting and expanding upon an ideological emphasis incorporated through the use of "map logic" in *Dragon Quest.*

Visuals, however, were only one dimension wherein *Dragon Quest* relates to CRPGs. *Dragon Quest* utilized the random, turn-based battle feature from *Wizardry* instead of having battles on maps the way *Ultima* did. Instead of interacting with dungeon monsters in real time, like *Ultima*, monsters interrupted in-game walking. As players explored the landscape, a small image of a single monster would appear with a sharp change in music. The player chose from a list of battle commands, including fighting with a weapon, casting healing or attack spells, running from battle, or using an item's special effects.

The slight differences in *Dragon Quest* and *Dragon Warrior*'s battles should not detract from the importance monster fights serve in these games. After fights in *Wizardry, Ultima*, and both versions

[52] Nintendo created the battery save feature in order to bypass the need for players to use long passwords to record their advancement in different games. The save feature on the Famicom would work similarly to the save features used on the CRPGS. See Kurt Kalata, "The History of Dragon Quest," *Gamasutra*, February 4, 2008. Accessed July 18, 2012 from http://www.gamasutra.com/view/feature/131926/the_history_of_dragon_quest.php.

of Enix's game, players earned experience points that eventually led to "gaining a level." A mechanic inspired by *Dungeons and Dragons* type games, gaining levels meant characters learned new abilities and gained new powers. In *Dragon Quest*, players began at level one. Through battling enemies like slimes and bat-like drakees (sic) surrounding the beginning castle, the player gained levels. At level three, players learned a heal spell. Using this ability granted the player additional hit points and protected them from dying at the hands of their enemies. Players earned more spells at higher levels, including a spell that damaged enemies, a spell that prevented enemies from casting their own magic, and an ability that put the enemy to sleep for a variable number of combat rounds.[53]

Monster battles are the central method for gathering experience and leveling a character in RPGs, but the differences in *Ultima*, *Wizardry*, and *Dragon Quest* show that designers have choices in how players will encounter these battles. Starting with *Dragon Quest*, JRPGs moved away from presenting dungeons in the first person view used by *Ultima*, and instead kept the overhead view of the game world. Additionally, monster battles followed *Wizardry's* convention where separate fight screens appeared that detailed the information about the monsters. "Random monster battles" would remain a JRPG staple and utilized in the *Dragon Quest* franchise through *Dragon Quest VIII: Journey of the Cursed King*.[54] The random battle feature would also appear in many other game franchises, including *Final Fantasy* and *Pokemon*.

Analysis of *Dragon Quest* in this section of the chapter follows treating genre as a spatial term. Through this analysis, we see that *Dragon Quest* broke from the conventions of *Ultima* and *Wizardry* in depicting dungeons, those dangerous places where monsters roamed and darkness threatened to consume players. By shifting to an overhead, "map" perspective, Horii and Nakamura placed greater visual significance on character images while also allowing players to "peek" over dungeon and town

[53] Thomas H. Apperley, "Genre and Game Studies: Toward a Critical Approach to Video Game Genres," *Simulation & Gaming*, 37 n. 1 (2006): 6-23. Accessed June 10, 2015, doi: 10.1177/1046878105282278.
[54] Kalata, "The History of Dragon Quest."

walls to see what lie on the other side. Wells argues "If we supplement temporal genre metaphors with spatial ones, we can move more easily between literary and rhetorical genres."[55] A spatial analysis of Dragon Quest becomes quite literal, and one can see distinct rhetorical approaches in how game designers can choose to represent different spaces. *Ultima* and *Dragon Quest* borrow extensively from the visual motif of a map, providing players a virtual setting to navigate in the form of a top-down perspective. Yet *Dragon Quest* was more heavily invested in the map motif, its creators deciding to represent all spaces through this visual strategy, limiting first-person perspective to when a player encounters enemies.

Sonic Qualities of *Dragon Quest*

The use of sound and music were also effective tools for communicated space within *Dragon Quest*. Sound served an important aesthetic function of setting emotional tone within the different game spaces in *Dragon Quest* while remaining completely undeveloped in *Ultima* and *Wizardry*. As Heidi McKee reminds us, "Digitization and the increased convergence of computerized technology enable the integration of visual, aural, and textual elements with unprecedented ease."[56] *Dragon Quest* engaged the player through multiple sensory modes simultaneously, and visuals within game space were accompanied by musical scores and sound effects. Following McKee's logic that music functions on an expressive plane, the spaces of *Dragon Quest* feature music that emotionally resonates with the purpose of the location. When players attempted to move through a wall, they heard an audible "thump" that provided a sense of solid surface. Towns within the game featured lively, upbeat tunes in major keys. Dungeons, on the other hand, had tense musical scores at a higher tempo. Music in dungeons created an aura of suspense and unease, the music in kingdom's castle suggested seriousness and duty, while the musical score in the countryside suggested openness and possibility. As players

[55] Wells, "Genre as Species and Spaces," 115.
[56] Heidi McKee, "Sound Matters: Notes toward the Analysis and Design of Sound in Multimodal Webtexts," *Computers and* Composition, 23 n. 3 (2006): 336. Accessed June 11, 2015, doi: 10.1016/j.compcom.2006.06.003.

journeyed deeper in some dungeons, the musical score slowed and incorporated lower notes. In the general landscape between villages and dungeons, players heard a song that alternatively ascends and descends through the scales. Music in *Dragon Quest* simulated a succession of musical instruments, although the majority of the music featured in the game resembled woodwinds or brass horns.

Dragon Quest employs multiple kinds of music, and Horii and Nakamura associated different musical scores with different kinds of spaces. The sonic elements of *Dragon Quest* also appear as a wholly new element of the genre. For both *Wizardry* and *Ultima*, sound remained an unexplored and underutilized sensory vehicle. In *Wizardry*, most game play remained silent, with only a few static clicks from the monitor to accompany playing. *Ultima* follows suit, using beeps to indicate when monsters attack or when the player moves. *Dragon Quest*, on the other hand, associated particular places with repeating musical scores, provided sound effects to coincide with particular game actions, such as casting spells or leveling up, and even climbing stairs or bumping into walls.

The sudden emergence of sound generically within *Dragon Quest*, and thus the association of JRPGs with musical scores, certainly crystalized in how Japanese audiences understood the genre. Music from the *Dragon Quest* franchise became famous throughout Japan, leading head composer for the game, Koichi Sugiyama, to release orchestrated versions of game songs for sale.[57] Other composers for later JRPGs, including *Final Fantasy's* Nobuo Uematsu, also sold recordings of their musical compositions for video games separately from the games themselves.[58] The addition of sound to the genre, however, speaks to a deeper level of technological change available to Japanese game designers in the 1980s. Media theorists Marika Lüders, Lin Prøitz, and Terje Rasmussen argue, "Genres operate dynamically as interaction between two interdependent dimensions, conventions and expectations, both

[57] See Patrick Gann, "Dragon Quest Suite" *RPGFan*, No Date Listed. Accessed March 27, 2015 from http://www.rpgfan.com/soundtracks/dq1-ss/.

[58] A complete list of Nubuo Uematsu's albums and the games in which he composed can be found on his commercial website. See "Discography," www.NubuoUematus.com, No Date Listed, Accessed March 27, 2015 from http://www.nobuouematsu.com/disc.html.

of which are constructed or 'afforded' by media and specific texts."[59] Since *Dragon Quest's* sounds and music did not seem to have any immediately clear generic antecedent in *Wizardry* or *Ultima*, it stands that the reason Horii and Nakamura injected it into *Dragon Quest* stemmed from a change in medium.

Musicologist Karen Collins explains that sound in video games was an ongoing struggle for developers in the 1970s and 1980s, with most game companies treating sound as dependent on the context in which the game would be played.[60] Early arcade video games, for instance, required developers to use hardware configurations to create the desired sounds. Additionally, given the social contexts of arcade play, where noisy environments potentially detracted from the need of game scores, sound effects were only incorporated to garner initial attention to the game. Collins goes further, emphasizing that programming video games and creating musical scores were two separate spheres of knowledge. She writes, "The social constraints of specialized knowledge required to program the software-and to develop audio and write music—also influenced the developing [audio] aesthetic, with many composers lacking formal musical training."[61] Initial releases of *Wizardry* and *Ultima* in 1981 for the Apple II computers faced strict limitations on their sonic possibilities. The Apple II had a single channel for sound, which was meant to indicate when the computer had a programming error or to warn of hardware issues.[62] This technological limitation accounts for the lack of sound in both games. *Dragon Quests* use of complex musical scores emerges from a configuration of the new sonic affordances by later technologies.

Improvements in visual aesthetic elements of *Dragon Quest* when compared to *Wizardry* and *Ultima* also suggest that changes in a medium encouraged the development of better visuals. The

[59] Marika Lüders, Lin Prøitz and Terje Rasmussen, "Emerging Personal Media Genres," *New Media Society,* 12 n. 6 (2010): 953
[60] Karen Collins, *Game Sound: An Introduction to the History, Theory, and Practice of Video Game Music and Sound Design* (Cambridge, MA: The MIT Press, 2008): 7-25.
[61] Ibid., 35.
[62] Ibid., 30.

artwork for in-game monsters in *Dragon Quest* stands out as colorful and expressive when compared to the simple wire frames and icons used in *Ultima*. Even the digital icons used in *Wizardry* pale in comparison to the fully drawn enemies in *Dragon Quest*. The new technological context of the late 1980s gaming consoles meant a vast improvement in aesthetics for video games, and *Dragon Quest*'s creators took full advantage. In the next section of this chapter, I turn to the technological improvements that appeared in the video game industry, and examine how these technologies served to create specific associations between JRPGs, comic book artists, and musicians.

New Technology and Improved Aesthetics

Both Nakamura and Horii enjoyed RPGs from the United States, specifically *Ultima* and *Wizardry*, but felt these games were too difficult for general audiences. In creating *Dragon Quest*, these designers made game play more intuitive for average Nintendo Famicom users in order to make their game more accessible. To capture the attention of a large audience, Horii approached manga artist Akira Toriyama, a frequent and famous contributor to *Shonen Jump*, who at the time was drawing his cartoon strip, *Dragon Ball*.[63] Toriyama drew character designs for Horii, and his visual contribution was paired with the musical talents of Koichi Sugiyama, a respected Japanese television composer.[64] Horii and Nakamura tasked Sugiyama with creating music that corresponded to game scenery so that the rhythms and beats the player heard would contribute to the atmosphere of the location he or she explored.[65] Horii also drew upon the cultural specificity of manga and the lyricism of Japanese haiku poetry when writing game text.[66] When sales of *Dragon Quest* reached 2 million copies, Enix began working on a sequel. Many of the decisions made by this game production company stem directly from the technology of the Nintendo Famicom. This section of the chapter dissects the technological

[63] Kurt Kalata, "The History of *Dragon Quest*."
[64] Ibid.
[65] Donovan, *Replay: The History of Video Games*, 161.
[66] Ibid.

advances made by Nintendo in their invention of the Famicom and how these technological improvements led to a generic divergence between JRPGs and CRPGs.

Without a doubt, programming for early technologies had a large influence on the development of early CRPGs, too, and these developments were not without their problems. Reviewer Deirdre Marlow explained that the save features for games were limited because of reliance on floppy disk technologies. *Wizardry*, in particular, faced problems with technological limitations of its original programming language, Basic. Basic made game-play too slow,[67] so developers Andrew Greenberg and Robert Woodhead pushed back the release until recoding it into the programming language of Pascal.[68] Once again, the game faced delays because of software compatibility issues with the Apple systems.[69] Technological limitations, particularly in computing language and processor speed, constrained design decisions in early CRPGs, but in the process of reinvention for the Japanese audience, JRPGs faced developments in technology that allowed for new creative opportunities, including the implementation of video game music. With these new technologies came new pathways and considerations when creating video games.

These technological advances also underscore how technological changes available to video game developers are similarly the result of strategic economic decision making. Applegarth's turn to an economic terminology illuminates the pressures *Dragon Quest* faced in terms of rhetorical invention. Specifically, Applegarth defines the concept of *rhetorical scarcity*, which she defines as "a manufactured situation of intense and increasing constraint within a genre that significantly restricts

[67] Marlow, "WIZARDRY: The Proving Grounds of the Mad Overlord," 6.

[68] The difference between Pascal and Basic was that Pascal was an object oriented programming language. This means that Pascal programmers would create a library of "objects" that would typically occur in their program, and that these objects would have particular qualities. Instead of programming each instance of this object separately, programmers could simply reference the object in the library through a command code. For a more in-depth explanation of Pascal, see Jonathon P. Jacky and Ira J. Kalet, "An Object-oriented Programming Discipline for Standard Pascal," *Communications of the ACM*, 30 n. 9 (1987): 772. Accessed June 11, 2015, doi: 10.1145/30401.30403. While Marlow is not specific on why Basic was slower than Pascal in this case, the reason is most likely because Basic at that time did not allow for object-oriented programming, which required computers to process greater amounts of code.

[69] Marlow, "WIZARDRY: The Proving Grounds of the Mad Overlord," 6.

rhetors' access to key rhetorical sources."[70] *Dragon Quest* reflects Horii and Nakamura's adaptation to the market pressures created by Nintendo's new technology. Nintendo, through the Famicom, introduced a technology that necessitated visual and sonic invention, creating a situation where game designers needed to improve visuals and sound so they could profit. New technology, therefore, altered the CRPG genre by creating additional pressure to address new affordances. While the term "scarcity" seems out of place in this particular context because the technology increased demand for creative visuals and sound, it nevertheless applies to the *pressure* it created for game designers. Applegarth explains:

> [R]hetorical scarcity helps us examine the direction of genre change over time and treats genre constraints as both manipulated and relative. That is, relative to prior possibilities within a genre, does the genre change in the direction of greater capaciousness and flexibility, extending the ways in which genre can be taken up and inhabited? Or does the change move in the direction of a kind of hardening of norms into absolute requirements, or a retrenchment into narrower limits and more severely delimited constraints? Whose interests are served by the direction of these changes?[71]

Rhetorical scarcity, when related to *Dragon Quest*, highlights the underlying technological constraints created with Nintendo's development of a new console. These technological advances, in turn, inspired collaboration between game designers and artists. Treating genre in both economic and historical terms reimagines the JRPG genre as a merging of artistic and programming prowess because of market demand. This demand was constrained within the exigencies brought forth by the Famicom game system and Nintendo's business practices.

[70] Applegarth, "Rhetorical Scarcity," 455.
[71] Ibid.

Nintendo is certainly the most successful video game company to cross the Pacific from Japan to the U.S. Originally a company that specialized in printing special playing cards, Nintendo began branching out into other technological entertainment, such as shooting ranges that used light instead of actual ammunition, and toy drum synthesizers.[72] In the late 1970s, Nintendo began working with Magnavox to market Odyssey systems in Japan.[73] In 1977, then-president Hiroshi Yamauchi hired industrial design graduate Shigeru Miyamoto, who later created the characters of Donkey Kong and Mario, and tasked him with working on the art design for arcade game cabinets. Nintendo offered a diverse range of electronic toys, including chief Nintendo engineer Gunpei Yokoi's creation of portable gaming systems that used liquid crystal diode (LCD) screens.[74] In 1980, Yamauchi hired son-in-law Minoru Arakawa to open Nintendo America in Manhattan.[75]

Nintendo's first entrance into the U.S. did not go well. *Radarscope*, a space-based shooting game meant for arcades, sold only half of the 2,000 arcade machines made for the U.S. market in spite of larger successes in Japan.[76] After realizing that shipping games to the eastern U.S. added more time to game deliveries, Arakawa relocated to Redmond, Washington.[77] Around this time, Yamauchi had Miyamoto work with Yokoi to create the classic arcade game *Donkey Kong*. Nintendo's success in the United States, at least initially, came directly from Miyamoto's approach to character creation.

Donkey Kong's success earned Nintendo large profits, with reports of record-breaking weekly earnings of $288 for some single machines in October 1981.[78] The popularity of the game, however, stemmed from several important factors that would change how companies made games. Miyamoto

[72] Kohler, *Power Up*, 31.
[73] Ibid.
[74] Ibid., 34.
[75] Steven L. Kent, *The Ultimate History of Video Games*, (New York: Three Rivers Press, 2001): 155.
[76] Donovan, *Replay*, 100.
[77] Kent, *The Ultimate History of Video Games*, 156.
[78] Brady Games, "Donkey Kong," *JoyStik*, 1 n. 2 (1982): 12-19. Accessed April 21, 2013 from https://archive.org/details/joystik_magazine.

and Yokoi represented two different aspects of design, with Yokoi responsible for the technical creation of the software and hardware and Miyamoto for the aesthetics of *Donkey Kong*. Miyamoto's design strategies involved an emphasis on the creation of relatable characters. Technology and aesthetic aspects of game design merged under Nintendo, as visuals began to have the same kind of attention paid to them as the development and coding of game mechanics. Nintendo's business strategy marked an important difference from the many American companies that made CRPGs. *Wizardry* and *Ultima*, were created by hobbyist programmers working by themselves or for small production firms. With the entry of Nintendo into the video game industry, initially in arcades and later with its home consoles, a new era of video game aesthetics was born.

A main reason for the visual limits of early CRPGs is that early computing systems and game consoles had little memory space for extensive visualizations—higher resolution pictures and images took more memory space, which meant a need for faster processors. A game company faced strict technological limitations on visual representation, so these companies would not funnel important financial resources into hiring graphic artists. Miyamoto's involvement in Nintendo marked an important movement forward for game design, but it also underscored the movement of video game technology toward better graphical representation.

The graphic limitations of the gaming technologies pre-Nintendo Entertainment System gaming technologies, particularly those systems that hosted games like *Wizardry* and *Ultima*, resulted from the limits inherent in their visual processors. For example, the Apple II's microprocessor, make 6502, used two sets of 8-bit chips to keep track of file addresses in the memory of the computer.[79] An additional layer of programming code, called hexadecimal, converted information from binary machine code (a series of on-off information based on a single switch within the chip) to the monitor. Hexadecimal

[79] Ken Williams, "Apple II Graphics: An Inside Look," *Softline*, 1 n. 1 (1981): 8-11, 21-25. Accessed April 3, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.

coding, in coordination with the Apple monitor, allowed for quicker movement and storage of large blocks of memory. Some spots in the memory of the Apple machine contained "switches," where simply referencing the address of a piece of memory was enough to cause a new event to happen. Ultimately, for the Apple II, "only the last seven bits turn on a dot on the television screen."[80] These soft switches indicated to the computer which one of three distinct modes it should operate within: text, low-resolution graphics mode, or high-resolution graphics mode.[81] In text mode, the machine treated bytes of memory as codes for letter characters (not to be confused with game characters) and communicated them to the monitors. Coding treated monitors as a 40 x 24 grid containing different character positions. When the computer shifted to low resolution mode, code treated the monitor as a 48 x 40 grid, with each location on the grid appearing as one of two possible colors. In the third and final mode, each byte of memory translated into presentations of seven possible colored dots appearing on a monitor divided into a 192 x 280 grid, 28 times the positions of the low-resolution mode. The result is a more detailed image in both color and smoothness—although still considerably blocky by today's photorealistic resolutions.[82]

Several of the consoles released in the early 1980s faced criticism for not advancing past the low resolution offered by the 1970s consoles and computers. Writing in *Computer Gaming World*, game designer Jon Freeman explained some of the visual problems plaguing the then-new Commodore 64. He first mentioned how articles in popular press like *New York Times* and *Wall Street Journal* sounded less like reports on the machine and more like direct-to-print press releases. He then explained that the Commodore 64 delivered roughly the same performance as the earlier Atari 800, but with notable downsides in how the system was programmed. Freeman complained about the color

[80] Ibid., 25.
[81] Ken Williams, "Apple II Graphics: Mapping the Memory Maze," *Softline* 1 n. 2 (1981): 9-12. Accessed April 3, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.
[82] Ibid.

limitations of the Commodore, its inability to provide collision detection adequately for in-game sprites, and the machine's inability to distinguish commands from a keyboard from that of a joystick.[83] While a later letter to the editor attempts to defend the machine, the general consensus was that the Commodore 64 had several quirks that frustrated programmers.[84]

At Nintendo, Yamuachi had tasked engineer Masayuki Uemera to make a console that was at least a year more technologically advanced than the Atari 2600 and Commodore Max Machine released in Japan.[85] Through a series of experiments with the computing components behind arcade machines, Uemera met Yamuachi's demands through a series of microchips. The first chip, the 6502 microprocessor, worked to coordinate instructions from the cartridge and communicate them to a second microchip in the machine.[86] Nintendo released its new system that allowed incorporation of new and higher resolution images into videogames. Called the Famicom, the machine featured the use of both the 6502 processing chip and a secondary processor for graphics.[87] The controllers for the system were based on Gunpei Yokoi's control scheme for the earlier LCD game *Game and Watch*. By 1983, the Famicom, short for Family Computer, had replicated Atari's success in North America solely within the Japanese market.[88] The Famicom made it possible for large improvements in video game visual quality, primarily because it operated differently than the already existing consoles.

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[83] Jon Freeman, "The Name of the Game," *Computer Gaming World*, 3 n. 5 (1983): 25. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

[84] Ken St. Andre, "C64 Defended," *Computer Gaming World*, 3 n. 6 (1983): 15, 50. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

[85] David Sheff, *Game Over: Press Start to Continue*, (Wilton, North Carolina: Game Press, 1999).

[86] The 6502 chip was responsible for many important computing advances, but its incorporation in the Famicom and Nintendo Entertainment Systems meant unprecedented sales. See Nikhil Sawminatha, "Digging into Technology's Past," *Archaeology*, 64 n. 4 (2011): 30-33. Accessed June 11, 2015 from *Academic Search Complete*, EBSCO*host.*

[87] Kent, *The Ultimate History of Video Games*, 278. See also: Christian Nutt and Benjamin Turner, "Nintendo Famicom: 20 Years of Fun," *Gamespy*, July 3, 2005. Accessed December 4, 2014 from http://archive.gamespy.com/articles/july03/famicom/index5.shtml.

[88] Donovan, *Replay*, 158.

The Famicom would also move away from the six-to-eight color enabled Texas Instrument chip (T19918) used in competing machines, and ultimately use a processing chip that they developed in-house. This chip received messages from the 6502 microprocessor and was called the Picture Processing Unit (PPU). The PPU processed roughly fifty two colors.[89] Additionally, the PPU also allowed for movable background images and up to 64 pre-programmed images, or sprites, on the screen at any one time.[90] By offering more than six times the amount of colors as competing systems, Nintendo paved the way for more sophisticated visuals, including the incorporation of more movement on screens at a given time.

Sound components to video games also saw a remarkable improvement with the invention of the Famicom. As Collins explains, sound use in video games derived from the popularity of early pinball arcades, where bells and whistles attracted individuals to the machines and got them to spend quarters.[91] With the move from arcades to homes video games required different modes for utilizing sound. Atari games in the arcade, where arcade machine sounds had been more highly developed, did not translate into the same quality of sound at home due to the lack of appropriate compatible technologies for home consoles. The 1977-1992 Atari Video Computer System (VCS) had the Television Interface Adapter (TIA), a chip designed by Atari for this machine specifically.[92] Atari competitors Mattel and Coleco incorporated sound chips that mirrored the technology found in arcades, and represented a general improvement in the sound available on consoles whereby easily recognizable music compositions could directly code onto cartridges.[93]

Nintendo's sound chip provided game designers with five possible channels of sound use. Invented by Yukio Kaneoka, a composer that also worked on the soundtracks of notable games such as

[89] Sheff, *Game Over*, pp. 30-31.
[90] KryptonWare Solutions, "System Information: Nintendo – NES," Accessed July 23, 2013 from www.kryptonware.com.
[91] Collins, *Game Sound*, 7-8.
[92] Ibid.
[93] Ibid.

Mike Tyson's Punch Out, the chip allowed musicians to use one channel for the lead instrumentation and a second for accompanying instruments. These "pulse wave" channels could create raspy or hollow sounds, and one of these channels allowed for smooth changing of notes without a break in sound.[94] A third channel produced lower octaves of notes that typically worked best for simulating bass tracks. The fourth and fifth channels provided for the use of white noise effects, such as background wind or rain effects, and the final channel allowed for replaying of short digitized samples of pre-recorded effects. Nintendo's Famicom allowed video game producers to create more involved and complex musical scores, increasing the sensory range available for directing the player's experiences.

The improved technological apparatus for showing images and creating sounds meant a subtle shift in the creation of video games, one that mirrors Yamauchi's hiring of Miyamoto in Nintendo's headquarters years earlier. Advances in visualization meant video game developers could no longer appease audiences with blocky, unrefined characters or poor use of screen space. Additionally, the system's increased capacity for greater color variation meant video game developers needed to consider visual communication more critically. This improved technology made the hiring of artists and graphic designers necessary. If Nintendo could attract audiences through colorful characters created by artistic types like Miyamoto, then other companies needed to make the most of the visual aspects of the medium as well. The Famicom's success in Japan meant companies needed to find avenues to recruit artistic talent. The technological advancements made by Nintendo, and the calls for better visuals in game systems overall, made looking toward *Shonen Jump* for recruiting video game designers logical. Recruiting programmers from popular media that emphasized visual communication rested its rationale on the recognition that video games needed to appeal visually.

[94] Ibid. 16-18.

When Yuji Horii turned to manga artist Akira Toriyama to design characters for *Dragon Quest*, it reflected a consideration of the visual as both a rhetorical and economic strategy. Toriyama designed the enemies and game world in *Dragon Quest*, and his designs for these creatures are also rhetorical responses to what the medium visually enabled. Toriyama's distinct visual style involved the use of bright colors and clean lines. Similarly, he employed the cultural aesthetic of "kawaii," a sense of exaggerated cuteness present in Japan's popular culture.[95] Toriyama's depiction of the slime monster in *Dragon Warrior* illustrates this "cuteness." The slime monster is typically the first enemy players encounter, and consists of a simple blue teardrop-shaped enemy. Two large round eyes and a red smile comprise the slime's face, and the enemy reappears throughout later games in the *Dragon Quest* and *Dragon Warrior* franchise in various colors and configurations.

The kawaii aesthetic also extends to other enemies. For instance, bat-like drakees (sic) consist of a simple roundish body, two wings, a small tail, and little ears drawn around an impish smile and white eyes. Another enemy type depicts a smiling ghost wearing a pointed hat and sticking its tongue at players. These enemies contrast with other, more serious (and when game-play is considered, more dangerous) drawings of skeletons and dragons. Depictions of humanoid enemies wearing clothing often have skin colors that offer strong contrasts to the costuming, such as the yellow-furred werewolf that wears a bright blue tunic, red belt, and brown shoes. The ability of Toriyama to utilize these visual contrasts stems, of course, from the ability of the Famicom to actually use those colors. With the limited color palette available to the Apple computers, designers of *Wizardry* and *Ultima* could only

[95] For greater depth on kawaii, see Adrian Cheok and Owen Fernando, "Kawaii/Cute Interactive Media," *Universal Access in the Information Society,* 11 n. 3 (2012): 295-309. Accessed on June 11, 2015, doi: 10.1007/s10209-011-0249-5; Laura Miller, "Cute Masquerade and the Pimping of Japan," *International Journal of Japanese Sociology,* 20 n. 1 (2011): 18-29. Accessed June 11, 2015, doi: 10.1111/j.1475-6781.2011.01145.x; Daniel Black, "The Virtual Ideal: Virtual Idols, Cute Technology and Unclean Biology," *Continuum: Journal of Media & Cultural Studies*, 22 n. 1 (2008): 37-50. Accessed June 11, 2015, doi: 10.1080/10304310701642048; Gunhild Borggreen, "Cute and Cool in Contemporary Japanese Visual Arts," *Copenhagen Journal of Asian Studies,* 29 n. 1 (2011): 39-60. Accessed June 11, 2015 from Business Source Complete, EBSCOhost.

dream of utilizing such color diversity.

Nintendo's console also represented a dramatic improvement in sound quality. To create sound that would be pleasing to hear for this system, music producers faced additional challenges. These problems become apparent by looking to *Super Mario Bros.* composer Koji Kondō. Kondō "learned about the challenges of writing music that would be listened to over and over without becoming annoying, bland, or too jingly."[96] The hurdles facing composers of video games, then, were to create music that was enjoyable but not irritating when repeated. Composers focused on the memorability of music and having it fit the players' experiences. For *Super Mario Bros.* it meant uplifting, "happy" music for over-world levels and lower bass use for underground levels to increase tension. Similar challenges confronted composer Koichi Sugiyama during his tenure with *Dragon Quest*. Yet, Sugiyama's previous experience with commercial television prepared him for the limitations of the video game format. Individually, commercials have a short time to ingratiate themselves musically with audiences. Additionally, television, like video games, emphasizes the visual. Thus, the musical choices a composer makes need to compliment visual action.

Sugiyama's emphasis on simulated flutes and drums represent rhetorical decisions, choices meant to collaborate and emphasize the scenery players explore. When players enter darkened dungeons, the music slows and enters a deeper key as the player travels deeper into the cave. This enhances tension by emphasizing depth. Deeper and slower music reminds players of their distance from the cheerful, mellow tunes of the over-world. The somber tones of the King's throne room remind the player of the seriousness of the quest on which they have embarked.

Toriyama's emphasis on "kawaii" and Sugiyama's skillful musical scores are immediately visible and audible adaptations to the rhetorical scarcity introduced by Nintendo's Famicom console.

[96] Jeff Ryan, *Super Mario: How Nintendo Conquered America*, (New York: Penguin Publishing, 2012): 70.

Rhetorical scarcity asks the critic to delve deeper than this immediate sensory adaptation. Applegarth writes that "economic inflections of the term scarcity remind scholars that genre boundaries are not constructed naturally or inevitably, but through the actions of genre users who are always embedded in relations of power."[97] The analysis above details how the invitations extended to Toriyama to produce visuals and Sugiyama to produce music was, in and of itself, a rhetorical decision. The invention of the Famicom by Nintendo created enormous market pressure on game designers to implement the visual and sonic components of the technology in innovative ways and therefore capture the attention of audiences. But Nintendo was not a direct user of the RPG genre, at least not when the company decided to produce the Famicom system. Rhetorical scarcity, then, can develop not only from particularly influential texts within a genre, but also from changes in the technologies available to those working within the genre. Nintendo effectively created a demand for increased artistry in both game visuals and sound by inventing a technology capable of more colors and sound channels. The market demand for visuals and music, in turn, created an impetus and logical need to involve professional artists and musicians.

Conclusion: Genre and the Dimensions of Social Action

Within the video game industry, or at least among its historians and popular critics, JRPG remains a distinct subcategory of video game.[98] In this way, the history of *Dragon Quest* helps illuminate how the JRPG designation becomes useful for explaining the decisions and exigencies facing game designers. Recognizing the technological constraints facing game designers like Horii and

[97] Applegarth, "Rhetorical Scarcity," 475.

[98] Numerous examples from recent popular sources support this notion. For a few examples, see Jason Schreier, "Why Do People Care about JRPGs?"; Hollander Cooper & April Halog, "The Most Annoying JRPG Cliches (that we still totally love)," *Gamesradar*, August 3, 2012. Accessed January 8, 2014 from http://www.gamesradar.com/most-annoying-rpg-cliches-we-still-love/; Phil Kollar, "This Generation's Must-Play JRPGs" *Game Informer*, March 26, 2012. Accessed January 8, 2014 from http://www.gameinformer.com/b/features/archive/2012/03/26/this-generation-39-s-must-play-jrpgs.aspx; Mandi Odoerfer, "Why 2013 was the Year of the JRPG," December 25, 2013, Accessed January 8, 2014 from http://www.gamezone.com/originals/why-2013-was-the-year-of-the-jrpg.

Nakamura helps one appreciate the development of the JRPG genre. Understanding how a game like *Dragon Quest* reuses older visual forms and conventions established in previous games similarly adds much needed historical relevance to the study of video games. As the previous parts of this chapter emphasized, the Famicom represented a new technological situation, and as such, Horii and Nakamura grappled with what the Famicom could allow them to do. However, relying upon the technology and its capacities risks engaging in technological determinism. This conceptualization of genre would partition JRPGs from one generation of games to another as fundamentally different because of newer and improved technologies, in spite of similarities in game play and visual aesthetics.

In presenting the development of *Dragon Quest* under the auspices of genre criticism, technological development is an important factor. While certain elements of genre shift in RPGs can be attributable to technological shifts, this fact does not negate the role of the rhetor in making specific design decisions. Rather, the rhetor must take into consideration what the technology allows them to accomplish—returning the critics attention once again to what technology affords. Critical understanding of video game genres requires understanding that genre, as Miller articulates, is a social endeavor. In tracing the technological developments of the video game industry, one easily finds examples of how technology itself was socially directed. Jon Freeman's discussion of visual limits of 1980s American game consoles in *Computer Gaming World* and Nintendo president Hiroshi Yamauchi's command to his engineers to make a new system with better visuals show that the game industry pushed technology in the direction of better visuals for social reasons. In the cases of *Dragon Quest* and *Dragon Warrior*, newer technology allowed for better sonic and visual representations to coincide with game mechanics (and ways of showing game worlds) borrowed from *Ultima* and *Wizardry.*

Thomas H. Apperley explains that the historical significance of *Dungeons and Dragons* for CRPGs remains central, and stating that CRPGs and JRPGs remediate fantasy authors like J. R. R. Tolkien or C. S. Lewis. Apperly argues that an important social dimension of playing that *Dungeons and Dragons* provided its players.[99] For Apperley, the social element of RPGs refers to the end-users, and he points to how although computers tended to leave the social out of the remediation, newer adoptions of the RPG genre in massive, online game worlds have taken up this social element once again. However, approaching the social in terms of the end-users misses the role of social action inherent in rhetorical invention. When one considers how genre works within the invention of these games, even single player games such as *Wizardry, Ultima,* and *Dragon Quest* remain firmly ensconced within social relationships and processes.

In seeing the new technological situation confronting Horii and Nakamura, I see "social action" as a collection of three interlocking terms—the technological, the relational, and the economic. Each of these terms overlaps significantly with one another, and they certainly are not the only dimensions of the social operating at any given moment. In treating *Dragon Quest* and its role within the JRPG genre, these three components of the social exert the greatest force on genre development. The technological dimensions of genre come to the forefront when industry leaders push for improvements of older technologies. These technological dimensions give rise to new economic dimensions, or rhetorical scarcities, wherein developers must adapt to new market demands. The strategies developed in response to these demands, at least in the case of *Dragon Quest*, involved incorporating new individuals into the invention process. Incorporating new individuals into a process relied on the abilities of the would-be rhetors to relate to new people. While *Dragon Quest* was being developed, Horii, Nakamura, Sugiyama, Toriyama, and the developers at Nintendo established a social network in

[99] Apperley, "Genre and Game Studies," 18

which future JRPGs would operate. Although the game rules within *Dragon Warrior* mirror *Dungeons and Dragons*, *Wizardry*, and *Ultima*, Enix's turn to Toriyama and Sugiyama for their visual and musical artistry results from the social fabric of their Japanese context. The artistry of Toriyama and Sugiyama and the technical design skills of Horii and Nakamura entwined, creating a rhetorical artifact constituted by both visual aesthetics and game mechanics. The model of social relationships, economic motivations, and technologically induced generic conventions would extend into future JRPGs.

Developments in a genre reflect more than just the creation of a successful text or change in medium. Rather, changes in genre result from the complex interactions among multiple dimensions of social behavior. These dimensions include technological developments, economic conditions, and the establishment and continuation of ongoing relationships. *Dragon Quest*, in its generic success, created additional rhetorical scarcity. Applegarth argues, "rhetorical resources are not inherently limited; rather, they are constructed within genres as available or unavailable, appropriate or inappropriate. Consequently, access to certain resources is what a genre constrains."[100] *Dragon Quest* instigated a repetition of patterns of relating, one that is successfully followed by Enix's primary rival in developing JRPGs.

The enormous popularity of *Dragon Quest* led to other Japanese developers to enter RPG production, and these games similarly called upon multiple forms of artistry. Also inspired by games like *Wizardry* and *Ultima*, Japanese developer Hironobu Sakaguchi saw *Dragon* Quest's visual style, heard its musical score, and marveled at its economic success. Citing an attraction to *Wizardry's* world-view but disappointment with its story, Sakaguchi created *Final Fantasy*.[101] Unlike Horii's initial successes with game development, Sakaguchi had endured low sales on two previous games.[102]

[100] Applegarth, "Rhetorical Scarcity," 475.
[101] Donovan, *Replay*, 162.
[102] Steve Boxer, "JRPG Legend Hironobu Sakaguchi—Interview," *The Guardian*, 24 February 2012, Accessed May 9, 2013 from http://www.theguardian.com/technology/gamesblog/2012/feb/24/hironobu-sakaguchi-last-story-interview.

Working with a small team of developers within Square Soft, Sakaguchi named this game "Final Fantasy" with the assumption that if the game did not sell well he would leave the video game industry.[103] Sakaguchi also found himself disliking the "cuteness" of the games he had been tasked to make, and thus sought to make *Final Fantasy* grittier and, additionally, more complex in terms of narrative.[104] This contrast similarly extended to the instructions given to Nubuo Uematsu, Square Soft's in-house composer, in creating *Final Fantasy*'s music and make sure it sounded significantly different from the upbeat tunes in *Dragon Quest*.[105] For artistic direction, Sakaguchi employed notable animation artist Yoshitaka Amano, whose work on the animated series *Speed Racer* led to a successful artistic career.[106] Unlike *Dragon Quest*, whose designer had inside ties to popular publications, Sakaguchi had to approach gaming publications to get them to write about the game. The only magazine initially publishing about the game in Japan was *Famitsu*.[107] In spite of these difficulties, *Final Fantasy* went on to sell all of its initial 400,000 copies in Japan, showing that alternative aesthetics were viable for the JRPG genre.[108] Like Enix, Squaresoft too sought out the expertise of multiple media professionals.

I present these details about *Final Fantasy* and its development to underscore how *Dragon Quest*'s role in genre evolution functioned as a relational model for the management of technological and economic adaptation. In creating *Final Fantasy*, Sakaguchi replicated the same strategies for adapting his organization to the technological demands of the Famicom and the economic pressures of the Japanese video game market. His adaptation mirrored Horii and Nakamura's turn to professional

[103] Ed Fear, "Sakaguchi discusses the development of Final Fantasy," *Develop*, 13 December 2007. Accessed May 9, 2013 from http://www.develop-online.net/news/sakaguchi-discusses-the-development-of-final-fantasy/0102088.
[104] Kohler, *Power Up*, 94.
[105] Ibid.
[106] Ibid.
[107] Fear, "Sakaguchi discusses the development of Final Fantasy."
[108] Kevin Gifford, "Hironobu Sakaguchi on Final Fantasy I's Roller-Coaster Development," *1Up*, 21 December 2011. Accessed on May 9, 2013 from http://www.1up.com/news/hironobu-sakaguchi-final-fantasy-roller-coaster.

manga artists, even though Sakaguchi eschewed cuteness in favor of grit. Sakaguchi ensured careful musical considerations by turning to a professional musician, and turned to magazine outlets to advertise the game. The relationships established between video game developers, manga artists, and musicians for both *Final Fantasy* and *Dragon Quest* resemble one another structurally.

Incorporating economic terms into genre analysis helps rhetorical critics establish reasons for why the people who utilize genres incorporate, reject, rearrange, alter, or even eliminate the specific traits within their genre. In *Dragon Quest's* case, changing developments in technology created by Nintendo led to new opportunities for game visualization at the same time it created the necessity for better visuals and sound use. While Nintendo's technological developments sit just outside the tracing the JRPG's traits in a historical and visual genre analysis, adopting economic terminologies alongside that genre history helps further illuminate the relationship between a genre and its medium. Invoking the concept of rhetorical scarcity alongside the diachronic emphasis of genre history helps illustrate a new technological situation confronting game developers for the Famicom, yet it also presents how *Dragon Quest* demonstrated the commercial viability for relationships between manga artists, musical composers, and game designers.

CHAPTER TWO

Circulating *Dragon Warrior* in New Kingdoms

In 1990 Enix Corporation's opened a North American branch office in the United States with the explicit purpose of localizing games for the western hemisphere.[1] As the lead developer of *Dragon Quest* and the English translation of that game, *Dragon Warrior*, Enix was responsible for reintroducing and reinventing CRPGs for a new generation of video game players. However, Enix had difficulty selling *Dragon Warrior* in the United States, and by 1996, it decided to close the American branch.[2] Enix's decision to close its American branch appears, on its surface, as solely an economic decision; translating games to English was too costly and its American sales too small to justify continuing the process. This decision, however, was also rhetorical and derived from the historical difficulties Enix had in selling their games to the American public. The earlier process of circulating *Dragon Quest* among English-speaking audiences, too, was rhetorical. *Dragon Quest*'s movement from Japan to the United States faced four overlapping rhetorical constraints: technological, legal, cultural, and promotional. Each shaped how the game operated rhetorically. These four rhetorical constraints point to how the rhetorical circulation of *Dragon Warrior* was shaped by the political economy of the video game industry.

In a 2004 essay in the *Quarterly Journal of Speech*, Michael Warner reviews the qualities of a public. One aspect of his definition of public concerns "the social space created by the reflexive circulation of discourse" and, in turn, that "publics act historically according to the temporality of their circulation."[3] Warner's conception of public inspired multiple rhetorical scholars to expand upon the notion of circulation, leading rhetorical scholar Mary E. Stuckey to declare, "it is clear that the logics of

[1] "Enix on a Quest," Epic Center, *Nintendo Power*, 80 (1996), 60.
[2] Ibid.
[3] Michael Warner, "Publics and Counterpublics (abbreviated version)," *Quarterly Journal of Speech*, 88 n. 4 (2002): 413-425. Accessed June 11, 2015, doi: 10.1080/00335630209384388. Warner expands upon this argument in a book. See Michael Warner, *Publics and Counterpublics* (Brooklyn, New York: The MIT Press, 2010).

circulation are fundamental to the study of public address."[4] In addition to circulation being necessary for understanding public address, it also avoids problematic distinctions between the veracity of text and images. Rhetorical scholars Cara Finnegan and Jiyeong Kang argue "circulation may offer public sphere theory a way to reconcile itself with images and vision," thereby avoiding the falling into a dichotomy that treats visual rhetoric in terms of "'good' and 'bad' images."[5]

Lester C. Olson's notion of "recirculation" demonstrates that publics do more than just give attention to images; publics can exert their agency by altering and recirculating the relevant rhetorical motifs for new political ends. Olson defines rhetorical recirculation as "a precise relationship among a body of remarkably similar compositions patterned deliberately after an earlier, almost identical composition."[6] Like genre, circulation enables rhetorical scholars to attend to the rhetorical history of an artifact. Olson asserts, "attention to modifications across a series of apparently similar compositions makes it possible, through public documents, to trace communicative patterns of active interaction with one or another of the earlier persuasive efforts."[7] Additionally, Olson's conception of circulation demonstrates how even slight changes to an image or accompanying text allows for new rhetorical meanings, often specific to the author's argumentative goals for the artifact's new audience. However, circulation can also be constrained. The processes of moving an artifact to the broader public introduces elements beyond a rhetor's control.

This chapter examines circulation by looking at the story of Enix's *Dragon Warrior* in the late 1980s. This chapter unpacks what Sean Patrick O'Rourke recognizes as an additional rhetorical

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[4] Mary E. Stuckey, "On Rhetorical Circulation," *Rhetoric & Public Affairs*, 15 n. 4 (2012): 609. Accessed June 11, 2015 from *Communication & Mass Media Complete*, EBSCO*host.*

[5] Cara A. Finnegan and Jiyeong Kang, "'Sighting' the Public: Iconoclasm and Public Sphere Theory," *Quarterly Journal of Speech*, 90 n. 4 (2004): 395. Accessed June 10, 2015, doi: 10.1080/0033563042000302153.

[6] Lester C. Olson, "Pictorial Representations of British America Resisting Rape: Rhetorical Re-Circulation of a Print Series Portraying the Boston Port Bill of 1774," *Rhetoric & Public Affairs*, 12 n. 1 (2009): 3. Accessed on June 11, 2015, doi: 10.1353/rap.0.0090.

[7] Ibid., 4.

dimension of circulation, where media producers (in his analysis, newspaper writers and photographers) can impart meaning through the strategic withholding of visual evidence or textual information.[8] O'Rourke argues that some forms of images might be withheld from larger audiences in order to remain consistent with other discourses on a topic, thereby touching upon the notion that rhetoric does not move freely among the public when uttered. Rather, O'Rourke suggests that there are considerable obstacles to the circulation of rhetoric. As Laurie E. Gries argues, "Circulation, to be clear, is largely beyond a designer's control, unlike distribution, which is a deliberate process. While circulation becomes visible by tracking an image's nonlinear, divergent, and unpredictable flows, distribution can be studied by zooming in on the intentional strategies deployed to disseminate an image."[9] By distinguishing between circulation and distribution, Gries recognizes an important property of communication. Human beings typically curtail or limit how their communication moves through spaces, often seeking to prevent a message from reaching certain audiences or particular contexts. Distribution, I would argue, represents a *type* of circulation marked by purposeful human agency. Even so, distributing a message relies upon constraints that potentially enable and circumvent how an artifact moves through a public.

To better understand rhetorical circulation, perhaps it is useful to consider it in terms of a river. The water in a river flows through a channel that, in turn, directs the water's movement. How the water flows comes from the twists and turns in this channel. No river, however, can escape the inevitable moments where tree branches, boulders, or other debris prevents the water's flow through the channel. In many cases, the water is still pushed through the channel: perhaps it flows over the debris, or perhaps it slowly carves other channels to travel through. Still in other places in the river, the water

[8] Sean Patrick O'Rourke, "Circulation and Noncirculation of Photographic Texts in the Civil Rights Movement: A Case Study of the Rhetoric of Control," *Rhetoric & Public Affairs,* 15 n. 4 (2012): 685-94. Accessed June 11, 2015 from *Communication & Mass Media Complete*, EBSCO*host.*

[9] Laurie E. Gries, "Iconographic Tracking: A Digital Research Method for Visual Rhetoric and Circulation Studies," *Computers and Composition*, 30 n. 4 (2013), 344. Accessed June 11, 2015, doi: 10.1016/j.compcom.2013.10.006.

simply stops flowing altogether and forms a stagnant pool. Likewise, video games move and travel through publics. Sometimes a game is taken up by audiences readily and happily, and in turn, the game circulates widely and many audiences come to play it. This does not occur naturally, but through carefully crafted channels of distribution. These are moments when humans dredge a river to make way for larger watercraft, and thus ensure safe and efficient travel downstream. Games that do not reach their intended audience correspond to moments where the river becomes blocked, either by debris or purposeful damming. A third possibility appears when a video game circulates in ways unanticipated by a game developer. In these cases, it is comparable to when a river overflows its banks and floods an area. The river metaphor points to different ways circulation of video game artifacts is sped up, slowed down, or moves in undesired directions. It can also allude to moments where part of a game, such as its images, can flow among an audience, while other constitutive elements of the game, such as its music, cannot reach the public.

If circulation provides insight into understanding *Dragon Warrior*, so too does *Dragon Warrior* provide insight into the rhetorical properties of circulation. Video game developers want their products to circulate in ways that make money, and they have crafted distribution channels to ensure games circulate. At the same time, modes of circulation constrain how video games reach their intended audience. Video game distribution channels potentially deprive game developers from garnering profits through successfully "delivering" the game to paying customers. Four general factors constrained the circulation of *Dragon Warrior*: legal factors, technical factors, marketing and promotional factors, and cross-cultural translation factors. More broadly, this chapter invites a consideration of how the political economy of media industries alter, arrange, and reshape how rhetorical practices flow through our social lives.

The game *Dragon Quest* becomes *Dragon Warrior* when Enix decides to expand its market and sell it to Western audiences. Explaining *Dragon Warrior's* movement within the United States requires a broader description of the video game industry, its key players, and the historical changes the industry experienced. I begin by examining the broader historical contexts of the American and Japanese video game industries, their relationship to one another, and how an economic crisis in the United States market led to new industrial practices. After attending to these historical contexts, I then discuss the four central constraints facing Enix's attempts to sell *Dragon Warrior* to the U. S. market. Each constraint—legal, market, technological, translation—is discussed in turn. I conclude with a brief discussion about how the political economy of rhetorical circulation in mass culture. Discussions about the relationship of rhetorical circulation and political economy, I argue, help explain why some rhetorical artifacts circulate effectively through culture and others encounter more resistance.

Video Game Industries in the United States and Japan

Modern video games originated from advances in computing in the mid-20th century.[10] Early instantiations of games and computing focused on creating programs that allowed machines to simulate human players in board games such as chess and checkers.[11] In 1958, former Manhattan Project member William Higinbotham created an interactive exhibit to demonstrate new technologies created by the U. S. government.[12] Part of this exhibit included *Tennis for Two*, a tennis-based game played on an oscilloscope screen.[13] A mere three years later MIT students Steve Russell, Dan Edwards, Peter Sampson, Alan Kotok, and Bob Saunders combined their programming and engineering expertise to create *SpaceWar!*, a program run on MIT's PDP-1 computer.[14] The large size and expensive cost of the PDP-1 made commercializing *Spacewar!* unrealistic, leading MIT students to share free copies of the

[10] Tristan Donovan, *Replay: The History of Video Games* (Essex, United Kingdom: Yellow Ant Publishing, 2010).
[11] Ibid., 6.
[12] Ibid., 8.
[13] Ibid., 9.
[14] Ibid., 10-11.

program amongst themselves and with students from other universities.[15]

These two separate and notable creations marked the emergence of video games as a media form. Kline and his co-authors demonstrate that the technological origins of video games rely heavily on two intersecting U. S. institutions: the military and the university.[16] However, it was engineer Nolan Bushnell, who had come across *Spacewar!* as a student, that turned the machine game into a commercial enterprise. Bushnell constructed the first coin-operated video game in 1970, called *Computer Space*, and placed it in numerous public spaces.[17] *Computer Space* started the arcade phenomena, and numerous entrepreneurs followed Bushnell's lead by placing games in their own bars and businesses.

Arcade games reached Japan through U. S. Air Force member David Rosen, who had been stationed in Japan before the arcade boom. In 1957, Rosen started a company importing pinball machines from North America that brought arcade style gaming to Japan. In 1965, Rosen's company merged with another company to form Sega Enterprises.[18] Sega released a shooting arcade game called *Periscope* in 1966 that became popular in the Japanese market.[19] When the famous tennis-inspired game, *Pong*, migrated to Japan in 1973, the popularity of this machine led other companies to develop more games. [20] Among other things, when Japanese companies started creating these games, it meant Japanese arcades avoided shipping costs associated with importing machines from the United States. As a result, American companies often faced additional difficulty exporting their games to Japan. Bushnell attempted to sell Atari products in Japan and opened an office there, but failed to successfully

[15] Ibid.
[16] Stephen Kline, Nick Dyer-Witheford, & Greig de Peuter, *Digital Play: The Interaction of Technology, Culture, and Marketing*, (Montreal, Canada: McGill-Queen's University Press, 2003): 86.
[17] Ibid., 90-91.
[18] Ibid.
[19] Ibid.
[20] See Chris Kohler, *Power Up: How Japanese Video Games Gave the World an Extra Life*, (Indianapolis, Indiana: Brady Games, 2004): 14-19.

enter the market. Unable to spread Atari's influence into Japan, Bushnell sold the office to Nakamura Manufacturing Company, or Namco, a company specializing in amusement park rides and attractions.[21] While Namco specialized in importing U.S. games into Japan, other Japanese companies created their own games.[22] Some popular games, like Taito's *Space Invaders*, originated in Japan and were exported to the United States. Namco game designer Toru Iwatani created *Pac Man* to draw women to Japanese arcades.[23] Overall, Japanese companies were interested in the U.S. arcade market and frequently profited from market successes in both countries.

Video games were also developed for home computers in both Japan and the United States as personal computers became affordable for both business and entertainment purposes. Beginning in the early 1970s with companies like Commodore, personal computers attracted the attentions of numerous game developers even though these computers were often associated with work and professionalism.[24] Because many Japanese electronics manufacturers specialized in building computer components for the United States companies, these companies easily adopted their production for Japanese home computers as well. The Japanese market for home computers featured numerous machines, including the PC-8001, the Sharp X1, and the Toshiba MSX in the early 1980s.[25] The popularity of personal computers enabled companies, including Enix, a way to enter the video game production market.

A third mode of commercialized video games emerged in the invention of Ralph H. Baer.[26] The "Brown Box," which connected to television sets and displayed images on them was developed while Baer worked as a military contractor. In 1971 it found an audience as the newly released "Magnavox

[21] Ibid.
[22] Ibid.
[23] Ibid.
[24] Kline, Dyer-Witheford, & de Peuter, *Digital Play*, 93.
[25] Martin Picard, "The Foundation of Geemu: A Brief History of Early Japanese Video Games," *Game Studies*, 13 n. 2 (2013): paragraph 24. Accessed 2 February 2014, from http://www.gamestudies.org/1302/articles/picard.
[26] See Kline, Dyer-Witheford, & de Peuter, *Digital Play* and Donovan, *Replay.*

Odyssey."[27] Limited to presenting black and white images, the Magnavox Odyssey required colorful transparent overlays meant for taping onto television screens. Players would manipulate movement of a single cursor on the television screen through the settings depicted on the overlays. Seeking to replicate the Odyssey's success in Japan, Nintendo developed their own system called the Color TV Game 6 in 1977, which sold a million units and led to a newer, updated system called the Color TV Game 15 that also sold well.[28] Emboldened by the success of these products, Nintendo President Hiroshi Yamauchi ordered his engineers to create an even more impressive gaming system, which would later become the Famicom.

Although arcade games came to Japan through the U. S. military, Japan's video gaming industry developed quite differently than the United States. While the U. S. video gaming market developed in relationship to military and academic contexts, Japan's video game industry, as Martin Picard argues, owed large portions of its success to an already strong amusement industry.[29] The Japanese video game industry "developed from the outset by entertainment corporations and import/export businesses that were already well established in the consumptive post-war Japan."[30] From its earliest inception, the Japanese video game industry featured collaborations between electronics and toy manufacturers rather than military engineers and academic programmers. Unlike the United States, where video games developed as deviations from the original purposes of academic and military computing machines, the Japanese viewed video games as an acceptable hobby and digital games were thoroughly commercialized.

The two different geographical and national markets of the United States and Japan, although interrelated, deviated in the development of video games. However, these distinct markets continued to

[27] Kline, Dyer-Witheford, & de Peuter, *Digital Play*, 92.
[28] David Sheff, *Game Over: Press Start to Continue* (Wilton, North Carolina: Game Press, 1999): 27.
[29] Picard, "The Foundation of Geemu," paragraph 10-15.
[30] Ibid, paragraph 12.

develop alongside one another. The differences between the United States and Japan also featured different business environments that required distinct rhetorical approaches by video game producers. The U. S. video game industry would take a dramatic turn in 1983, when the U. S. video game crashed. At the same time in Japan, Nintendo released the Famicom, which enjoyed remarkable economic success.

The next section of this chapter traces these two interlocking histories and explains the distinct rhetorical landscape that developed in the United States. Because of drastically different market realities, this rhetorical landscape provided Nintendo with important oversight over how Japanese games entered the U. S. context. Nintendo's ability to intervene in game translation process allowed the company to edit *Dragon Warrior* and numerous other North American game titles. Nintendo's market position granted the company significant agency in dictating how *Dragon Warrior* was framed for the American public. This market control comes directly from the disarray and economic problems facing video game developers after the 1983 video game market crash.

The 1983 Market Crash in the Video Game Industry

Game piracy was one of the most pressing concerns for video game developers prior to 1983, prompting many discussions among industry insiders. In 1981, Atari developer Chris Crawford condemned piracy as theft: "As an author, I can accept the low royalties I make on my programs because there is always the satisfaction of knowing that I am making people happy when they play my games. But when I discover that people cheat me by stealing my games, my anger cancels the satisfaction. Nobody likes being ripped off."[31] Similarly, game designer Roe R. Adams compared piracy to a hydra and argued that the computer software industry needed to combat the phenomena by developing anti-piracy software, packing software with game-related paraphernalia to entice customers

[31] Chris Crawford, "The Future of Wargaming," *Computer Gaming World*, 1 n. 1 (1981): 7. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=2&id=500.

to buy the complete packages, and even incorporating software serial numbers in order to track duplication.[32] Adams complained: "The real threat to the software industry lies not in the individuals or small groups, but in the professional, organized copiers—the people who duplicated for profit."[33]

The concern over piracy also extended to concerns about "copycat games" that duplicated game mechanics of already successful franchises. Jon Freeman, the creative director at Free Fall Associates at *Electronic Arts,* claimed that game producers faced the issue of "counterfeit" games.[34] Game developers often plagiarized game concepts, leading Freeman to lament "I do not want to be found in the company of con men and rip-off artists, even by accident."[35] By early 1983, Dana Lombardy reported that sales of game software dropped significantly because "There are too many games, too many rip-offs, and too many similar-designs."[36] A reviewer in *Softline* magazine complained that U.S. copyright law neglected computer programming, which left the industry open to legally sanctioned plagiarism.[37] Game producers had little recourse for claiming copyright violation. The legal system proved slow and unresponsive, despite litigation.[38] In the early 1970s, the game company Allied Leisure failed to convince courts to restrain another game company, Midway, from going forward with *Winner IV*, a four-player version of Atari's pong.[39] In 1980, Atari attempted to sue Activision for making games for the Atari 2600, but failed to convince judges that allowing other game manufacturers

[32] Roe R. Adams, "Software Piracy: The Slaying of a Hydra," *Computer Gaming World,* 2 v. 5 (1982): 10, 44. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=2&id=500.
[33] Ibid., 10.
[34] Jon Freeman, "The Name of the Game," *Computer Gaming World*, 3 n. 3 (1983): 22. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.
[35] Ibid., 22
[36] Dana Lombardy, "Inside the Industry," *Computer Gaming World*, 3 n. 4 (1983): 4. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.
[37] Allan Tommervik, "The Great Arcade/Computer Controversy, Part 1: The Publishers and the Pirates," *Softline*, 1 n. 3 (1982): 18-22. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=6&id=500.
[38] Jon Freeman, "The Name of the Game," 20, 41.
[39] William K. Ford, "Copy game for High Score: The First Video Game Lawsuit," *Journal of Intellectual Property Law,* 20 n. 1 (2012): 1-41. Accessed June 11, 2015 Academic Search Complete, EBSCOhost.

to make games for their system could harm the industry.[40]

Both game piracy and the unresponsiveness of the legal system to claims of copyright infringement were interpreted as severe threats to game developers' profits. Concerns over piracy and game plagiarism gave way to outright panic by 1983, when the U. S. console market saw several prominent companies either claim bankruptcy or leave the console market altogether. Additional economic pressure was created by the sheer number of game consoles on the market during this time. At the 1982 Consumer Electronics Show (CES) in Chicago, the number of video game consoles on the market doubled from the previous year. The Atari VCS, Atari 5200, Mattel Intellivision, Odyssey2, and Astrocade suddenly faced competition from new consoles.[41] These machines faced competition from the ColecoVision, Emerson Arcadia 2001, and Creativision. The new machines meant new entrants into the video game development market and a large expansion of game titles. In 1981, companies released over 500 games.[42] By the middle of 1982, 375 new games had already flooded the market.[43]

Moreover, technological progress in home gaming consoles had caught up to the computing power of business machines, resulting in a "blurring" of the categories of business computer and home computer. As one industry reporter wrote in 1983, "Manufacturers are now looking at the home electronic market more as a continuum which they can reach with three types of machines, the home video machine, the HOME [sic] computer, and the PERSONAL [sic] computer."[44] With the entry of new consoles and home computers into the market, game developers had to make decisions about which machines would host their games. More options meant the difficulty of creating software for

[40] Casey O'Donnell, "Production Protection to Copy(right) Protection: From the 10NES to DVDs," *IEEE Annals of the History of Computer*, 31 n. 3 (2009): 54-63. Accessed April 22, 2013 from *Business Source Complete*, EBSCO*host*.
[41] Danny Goodman, "Home Video: How Do You Choose?," *JoyStik*, 1 n. 2 (November 1982): 56-57. Accessed April 21, 2013 from https://archive.org/details/joystik_magazine.
[42] Dana Lombardy, "Inside the Industry." *Computer Gaming World*, 3 n. 2 (1983): 2. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.
[43] Ibid.
[44] Russell Sipe, "Computer Games in 1983: A Report," *Computer Gaming World*, 3 n. 2 (1983): 10-11. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

multiple systems. Some game designers called for a machine that would make games more easily translatable to different systems. Trip Hawkins, founder of Electronic Arts, cited the need for some sort of "master machine" that could do translating work for developers.[45] However, since no machine existed, game developers needed to make decisions in advance regarding what system would hold their games, even before those systems earned attention from gamers. Thus, many game developers took immense risks by banking on the popularity of a single system. If that system failed, the games would remain unsold.

At the same time, wholesalers, who bought software in bulk from developers for direct distribution to store-level retailers, provided new sales data for game producers.[46] This data had the unexpected effect of allowing game developers to anticipate sales, leading companies to produce more copies of games than would end up being sold. For example, Atari produced more of *Pac-Man* than there were systems in the market, leaving them with 5 million unsold copies of the game.[47] The combination of an over-saturated console market and developers anticipating unrealistically high sales led to a systemic crash of the console game market.

The gaming industry 1983 console market crash devastated industry leader Atari. The once profitable company, which was now a subdivision of Warner Communications, lost the parent company a whopping $536 million.[48] Atari had so many unsold games that the company dumped them en masse in a landfill in New Mexico in 1983.[49] By the end of 1985, several of the main competitors in the U. S. home console market discontinued their products. With the Apple II and Commodore 64 shifting

[45] David Long, "ELECTRONIC ARTS: Trip Hawkin's Dream Come True," *Computer Gaming World,* 3 n. 5 (1983): 10. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.
[46] Dana Lombardy, "Inside the Industry," *Computer Gaming World*, 3 n. 3 (1983): 2. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.
[47] Steven L. Kent, *The Ultimate History of Video Games,* (New York: Three Rivers Press, 2001).
[48] Ibid.
[49] Associated Press, "Diggers Find Atari's E. T. Games in Landfill," *USA Today*, April 26, 2014. Retrieved on April 11, 2015 from www.usatoday.com. See also, "Atari Parts are Dumped," New York Times, September 28, 1983, Retrieved May 10, 2015 from www.nytimes.com.

interest from game consoles to personal computers, console manufacturers such as Coleco, Mattel, and Atari faced declining interest in console gaming in the U.S.[50] One industry insider reported that "while 1984 sales of video game hardware and software slid alarmingly from previous record levels, millions of Americans took the plunge and bought their first computer."[51] With the industry in tailspin, Warner Communications would split Atari into smaller companies; sell the console division to former CEO of Commodore, Jack Tramiel, and keep the arcade division for itself.[52]

With the U. S. console market in tatters, the scene was set for Nintendo to sell their Famicom to Americans. In effect, the game crash of 1983 cleared the American marketplace of console manufacturers. Nintendo's executives had the opportunity to enter the market without facing competition from other companies. However, Nintendo executives correctly surmised that the video game crash required aggressive contractual practices and business strategies, which would allow them to avoid another crash. Nintendo's expansion strategies and general business practices included addressing the concerns over piracy that bedeviled game developers. But Nintendo also utilized business practices that specifically addressed and prevented the oversaturation of the console market with copycat games. Nintendo's technological, legal, and financial responses to the video game crash in the United States reveal the historical contingencies that shaped *Dragon Warrior's* circulation in the United States.

[50] Kent, *The Ultimate History of Video Games*, 252-253.
[51] Arnie Katz, "1984: The Year that Shook Electronic Gaming," *Electronic Games Magazine*, January (1985): 30. Accessed June 11, 2015 from https://archive.org/details/electronic-games-magazine.
[52] Dave Their, "Computer Legend and Gaming Pioneer Jack Tramiel Dies at Age 83" *Forbes,* 9 April 2012. Accessed May 10, 2015 from http://www.forbes.com/sites/davidthier/2012/04/09/computer-legend-and-gaming-pioneer-jack-tramiel-dies-at-age-83/. See also Kyle Orland, "Today's Atari Bankruptcy Latest in a Long History of Corporate Deaths," *Arstechnica*, 21 January 2013. Accessed June 11, 2015 from http://harusuk.com/gaming/2013/01/todays-atari-bankruptcy-latest-in-a-long-history-of-corporate-deaths/.

Conquest of the U.S. through Contracts and Lawsuits: Nintendo takes America

Amid the build up to the 1983 market crash, Nintendo's *Donkey Kong's* became hugely popular in the United States. Nintendo's Shigeru Miyamoto developed *Donkey Kong* for arcade play. However, seeing the potential for large profits, Nintendo signed a licensing agreement with video game company and toy manufacturer Coleco.[53] The agreement promised royalties to Nintendo for selling *Donkey Kong* cartridges compatible with the Colecovision, and made Coleco responsible for the content of the game itself.[54] At the same time, Nintendo's newly developed Famicom console proved profitable in Japan. Ultimately, the Famicom's success in Japan emboldened Yamauchi to enter the failing U. S. console market. At first, Nintendo worked with struggling Atari to market the Famicom system in the United States.[55] However, between Nintendo's legal issues with distributing Donkey Kong and market troubles at Atari, Nintendo eschewed partnerships and marketed their own machines to the United States.[56] At the January 1985 Consumer Electronics Show in Law Vegas, Nintendo of America displayed their new system, the Advanced Video System (AVS), a console that eventually transformed into the Nintendo Entertainment System.[57] Initially, there was little interest in the AVS because the video game market was so depressed. Discouraged but not defeated, Nintendo, under direction of Minoru Arakawa and Howard Lincoln, added two important elements to their machine: a 9.5 inch tall grey robot called Robotic Operating Buddy (R. O. B.), and a light gun used for shooting games.[58]

By introducing the R. O. B. and the light gun, Nintendo sought to reframe the system as a toy rather than a video game system. Renaming it the *Nintendo Entertainment System*, Arakawa and Lincoln set out to New York for market testing under the assumption that if the system could succeed

[53] Kent, *The Ultimate History of Video Games,* 208.
[54] Ibid., 209.
[55] Ibid., 281.
[56] Ibid., 283.
[57] Ibid., 286.
[58] Ibid., 290-291.

there, it could succeed anywhere in the United States.[59] Reception for the system was generally positive, and market testing eventually expanded into Los Angeles, Chicago, and San Francisco.[60] At the end of 1986, Arakawa and Lincoln had the NES go national and packaged Miyamoto's newest game, *Super Mario Bros.*, with the systems.[61] With Nintendo's expansion into the United States, and the completion of the NES, a major technological component to *Dragon Warrior*'s ability to circulate within the U. S. context is formed. The first and second constraints on the circulation of *Dragon Warrior* appeared within the relationship between contractual obligations established by Nintendo and the technological apparatuses used to reinforce and ensure other game developers played by Nintendo's rules.

Legal and Technological Constraints on Circulation

The success of Nintendo's Famicom in Japan granted Nintendo a privileged position when negotiating contracts with other video game developers. In Japan, Nintendo included language in their contracts excluding certain types of games for the Famicom, and later, the NES systems. One example of their brand regulation was the exclusion of "bishojo games" from their licensing agreements. Bishojo games were a genre of Japanese games that were popular on the 1980s NEC PC-8801 computers.[62] The majority of these games had explicit sexual content, and sometimes featured violent game play scenarios.[63] Nintendo's licensing agreement forbade these games.[64]

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[59] Ibid., 292.
[60] Ibid., 299.
[61] Ibid., 300
[62] Ibid., 156.
[63] Emily Taylor, "Dating-Simulation Games: Leisure and Gaming of Japanese Youth Culture," *Southeast Review of Asian Studies*, 29, (2007), 192-208. Accessed June 11, 2015 from *Academic OneFile*. As a genre, bishojo eventually evolved into dating simulation games, a genre that fared well commercially in Japan but rarely translated well elsewhere.
[64] Controversial content in games was not only a Japanese concern. Atari's lack of control over the creation of games allowed the creation of adult-themed games as well. For instance, *Custer's Revenge,* a 1982 game produced by Caballero Control Corporation, faced protests when released in New York City because it rewarded successful game play with opportunities to rape a captive Native American woman. See Donovan, *Replay*, 98 and Kent, *The Ultimate History of Video Games*, 281.

Upon establishing the market presence of the NES in the United States, Nintendo duplicated this policy of brand regulation. The company demanded that NES publishers avoid the use of religious iconography, overly graphic depictions of violence, and sexual situations or humor. Historian Tristan Donovan has likened Nintendo's regulatory code to the Hays Code established by the movie industry to regulate, without government censure, what movies could and could not show from the 1930s to the 1960s.[65] Even Nintendo's own lead game designer Shigeru Miyamoto's work fell before the new standards held by Nintendo's American branch, as his game *Devil World*—chock full of Bibles, an angry Satan, and crosses—was banned from circulating among American audiences.[66]

In addition to reserving the right to control game content, Nintendo also sought to diminish financial risks when manufacturing NES games. For the Famicom, licensees needed to agree to a risky demand of ordering a minimum of 10,000 cartridges up front before games could go to market.[67] When establishing contracts for the NES, Nintendo increased their demands even more. Licensee contracts for the NES included limits on the number of games produced a year to five and mandatory payment for the manufacturing run in advance. Such contracts were designed specifically to remove the financial risk of a failed game from Nintendo entirely and limit competition against Nintendo's own company-produced games.[68] Not surprisingly, Nintendo's licensing agreement turned off several U.S. game manufacturers, who tended to see Nintendo's demands as overly draconian and one-sided. [69] Several companies, such as Electronic Arts and Broderbund, turned from console games to focus exclusively on producing games for personal computers.[70] However, many companies thought the technological and marketing advances within the Famicom, and later the NES, warranted investment.

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[65] Donovan, *Replay*, 168-169.
[66] Kohler, *Power Up*, 232.
[67] Sheff, *Game Over*, 62
[68] Casey O'Donnell, "The Nintendo Entertainment System and the 10NES Chip: Carving the Video Game Industry in Silicon" *Games and Culture*, 6 n. 1 (2011): 89.
[69] Ibid., 308
[70] Kent, *The Ultimate History of Video Games*, 307.

Nintendo, it seemed, had created a console that overcame many of the visual and auditory limitations of previous console and computer technologies, and game producers saw immense potential for profit in this enterprise even if it meant submitting to potential censorship and less-than-ideal contractual obligations.

Nintendo's legal contracts created specific pathways for circulation and enabled particular legal avenues for game developers to distribute games.[71] In effect, contracts not only represented a legal mechanism of a kind of self-imposed censorship but also established relational channels for the movement of a game from one locale to another. These contracts were written so that Nintendo would profit from the distribution of these games, while the costs associated with circulation of the games weighed upon the third party developers. The legal contracts also framed the consequences should developers stray from the paths of circulation that Nintendo established. Refusing to submit to Nintendo's demands could result in significant legal problems for game developers if they chose to still create games for the NES.

To demonstrate to potential gaming audiences that NES games would meet a certain standard of quality, Nintendo branded their products with the "Nintendo Seal of Quality."[72] The Nintendo seal communicated to customers that it was "safe" to purchase a game with the seal, as the quality of the

[71] O'Rourke argues that rhetors have some agency in deciding how images and text will circulate in "Circulation and Noncirculation of Photographic Texts in the Civil Rights Movement." Yet, O'Rourke focuses on circulation for the sake of rhetorical consistency, identifying moments where segregationist newspapers in the south chose photographs to downplay the civil rights movement. He writes, "The strategic circulation of just three photographic texts and the noncirculation of several others served, it seems, the rhetoric of those seeking to control or stifle the changes sought by Greenville's civil rights movement" (p. 691). While O'Rourke's argument focuses on the agency of actors at the newspapers, the newspaper itself serves as a channel for circulation, thereby limiting and opening ways for circulation to occur. A newspaper, as both a medium and a material object, sets the parameters and determines what features of communication can move, and which ones are stopped. While a material object, a newspaper is also an object substantiated from multitudes of legal and contractual obligations that exist prior to the printing of individual photographs. These legal and contractual relationships create standards for what can legally be circulated, and limits particular kinds of communication by framing those as inappropriate. The broader legal and professional context for newspapers during the civil rights era would include journalistic standards, the modes of profit generation that newspapers depended upon to continue their existence, and the legal relationships that framed how journalists, editors, and printers interacted with each other. The legal context for newspapers prohibits some forms of communication, such as pornography or fictional stories, from circulating on the physical medium of paper and ink that the newspaper organization created.

[72] O'Donnell, "The Nintendo Entertainment System and the 10NES Chip."

game had already passed the muster of Nintendo's standards. Nintendo also fixed their machines with legally protected technological mechanisms that would help keep non-licensed developers from creating games for the NES system. The NES consoles reserved space for a microchip, called the 10NES, and licensed Nintendo games contained a compatible chip that sent instructions to the 10NES chip to "unlock" the system and thereby run the game. The 10NES chip served as an authenticity check for the computing work of the NES system.[73]

These strategies—legal, branding, and technological—represented Nintendo's response to the 1983 U. S. game crash. Nintendo regulated the game market by keeping it from becoming overrun with copycat games or games with low production values. At the same time, Nintendo's legal contracts, marketing strategies, and technological advances created barriers for new entrants into the game industry. These barriers had been, by and large, absent from the U. S. console market before the 1983 crash. Atari, for instance, had tried in 1982 to stop third-party developers from creating games for the Atari 2600 Video Computer System by suing them. However, Atari lost these court cases. The result, as one historian writes, was a disorderly market: "Any company capable of determining how the 2600 worked and willing to pay for the cost of producing cartridges could then market their games, which set a low bar for quality."[74] By contrast, Nintendo's contracts required other companies from acting contrary to Nintendo's demands. This was not only legally enforced, but technologically encoded; the 10NES chip protected Nintendo's business interests, controlling the quality and content of games, and censoring content that did not fit within Nintendo's branding attempts. More importantly, the 10NES chip provided a way for Nintendo to "freeze out" games released by an unlicensed distributer, including games that might unfairly plagiarize game mechanics or themes, and prevent potential piracy of legitimate games.

[73] O'Donnell, "The Nintendo Entertainment System and the 10NES Chip."
[74] Casey O'Donnell, "Production Protection to Copy(right) Protection," 54.

Nintendo's contracts also dictated where these elements would flow. Business and legal contracts ensured that Nintendo served as the center of circulation for video games made for the NES, including *Dragon Warrior*. Nintendo dictated the flows of rhetorical circulation with their contract language, but contracts alone were not enough to ensure this market control. A technological apparatus was required to ensure the NES machine could not adopted by game designers unwilling to play by Nintendo's rules. The 10NES chip worked as a technological gate to prevent the circulation of some video games through the channel of the NES machine. The 10NES lockout chip acted as gatekeeper, allowing licensed games to operate and preventing unlicensed games from reaching audiences.

Not surprisingly, Nintendo's market power increased in the years between the NES's release and 1989, the year *Dragon Warrior* hit American stores. Nintendo was aggressive and litigious in its treatment of third-party game developers. Even retailers at the store level succumbed to Nintendo's influence. In December 1988, the game company Namco, who had bought shares in Atari after the game crash, sought to challenge Nintendo's supremacy and ability to control the game market by filing a lawsuit.[75] Nintendo's response was twofold: the company filed a countersuit in 1989 and similarly sent letters to game retailers warning against selling games created by a Namco subsidiary, Tengen.[76] The threat worked, and Tengen had no avenue to sell its games because retailers feared Nintendo would no longer stock their shelves with approved cartridges. If the legal and contractual language established pathways of circulation, the invention of the 10NES chip served to enforce these pathways, making it increasingly difficult for companies to work outside the parameters created by Nintendo's contracts. The chip served as a barrier to circulation, preventing games and companies unlicensed by Nintendo from entering the market, and thereby protecting Nintendo in the U. S.[77] By 1990, the company was in

[75] Kent, "Ultimate History of Video Games," 375-377
[76] Ibid.
[77] While some developers merely accepted Nintendo's market superiority, others chose to circumvent the 10NES chip entirely. The toy company Galoob saw Nintendo's success and released a device that altered the programming in NES

control of the U. S. console market. Nintendo wielded their contracts to ensure near monopolistic control over the console market.

Dragon Warrior Circulates in the United States

Dragon Warrior's circulation story was paradoxical. On the one hand, the game circulated fluidly through the U.S. video game market, propelled by Nintendo's legal, branding, and technological efforts to ensure tight market control. On the other, *Dragon Warrior's* smooth circulation profited neither Nintendo, nor *Dragon Warrior's* producer, Enix. In this section, I explain how *Dragon Warrior's* circulation did and did not map onto its popularity and profitability.

Enix's success with *Dragon Quest* in Japan had created an amicable relationship between the two companies. This did not stop Enix from having to preorder cartridges in order to enter the U. S. market. Willing to take the risk, Enix assumed that if *Dragon Quest* successfully sold over a million copies in Japan alone during its initial 1986 run, similar levels of success could be expected in the U. S. market.[78] Nintendo, too, seemed to anticipate big profits from Enix's movement into the U.S. market: The console manufacturer developed an advertising campaign to market the game two years before Enix had successfully translated and shipped the game across the Pacific.

Enix's prior existing, and relatively profitable relationship to Nintendo in Japan meant that Enix was already incorporated into the North American development network for the NES console and its associated games. Because of their contractual language and the 10NES chip Nintendo dictated, who would release games, how many games that company would release, and what those games would have as content. In terms of circulation, the combination of technology and business contracts created a kind

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games. Naming the device "Game Genie," Galoob had effectively bypassed the technical barriers implemented by the 10NES chip, and Nintendo sought legal penalties against the company. A court ruled against Nintendo, thereby allowing Galoob and other companies to create alternative technologies and bypass the lockout mechanism. See Sheff, *Game Over*, 243-245; Kent, *The Ultimate History of Video Games*, 375-377.

[78] Christian Nutt, "Analysis: Why is *Dragon Quest IX* so Popular?," *Gamasutra*, 29 July 2009, Accessed April 13, 2015 from http://www.gamasutra.com/view/news/115327/Analysis_Why_Is_Dragon_Quest_IX_So_Popular.php.

of inertia, where games that had Nintendo's approval circulated faster and further within North America and developers that fell outside Nintendo's good graces could not move product at all.

Technology and legal contracts form one side of the circulation equation, and these two factors seemed to position *Dragon Warrior* for rapid circulation among North Americans. The requirement to purchase cartridge production in advance, coupled with Japanese profits, meant Enix ordered numerous games to be distributed in the United States.[79] That Enix worked with Nintendo in Japan, and Nintendo similarly profited greatly from *Dragon Quest's* Japanese success meant that Enix would have little trouble convincing Nintendo to grant them North American distribution. But if legal contracts and technological appropriations meant *Dragon Warrior* would circulate quickly, it did not guarantee commercial success. Two other dimensions of rhetorical circulation hampered Enix's ability to profit from the game: the translation process and advertisements.

Before Nintendo sold copies of Japanese games to gamers in the U. S., those games needed to be translated. This translation process cost significant additional amounts of time and money before Enix or Nintendo could begin profiting from game sales. Translating games from Japanese to English takes considerable skill, both linguistically and technologically, as a game deals with four interlocking levels of changes: symbolic, graphical, game-play, and language.[80] Graphical and game-play translation refer to how game developers change graphics so they correspond to cultural appropriateness or the explanation of game rules so they make sense in other cultural contexts. Symbolic translation requires transforming easily recognized and culturally specific icons into other icons that can serve the as the same kind of shorthand in the new culture. Linguistic translators must work carefully to make sure that the second language captures the original meaning. Translation similarly reflects the premise that different languages take up different visual space. For instance, consider video game critic Chris

[79] Unfortunately, the exact number of copies ordered by Enix does not appear in the historical record.
[80] Kohler, *Power Up*, 206.

Kohler's work examining the visuals of Japanese video games.[81] He shows two screen-shots of the first *Final Fantasy* (an RPG created by Enix's primary rival in the late 1980s, Square Soft) in both its English and Japanese versions. For the roughly the same amount of meaning, the Japanese version uses three lines of text while the English version uses six.[82] Looking at the text sentence by sentence, the English text takes up 27 characters (not counting a second exclamation mark) while the Japanese text expresses roughly the same ideas through 13 kanji characters.[83] Because of these difficulties, the first *Dragon Quest* game would hit American shores in 1989 with the title *Dragon Warrior*, a full three years after the original Japanese game.[84]

In addition to the surface difficulties of translating text, games released in North America needed advertising to generate audiences. Video games occupy an important space in the economic shifts due to digital technologies and their differences from broadcast media like television and radio. Kline, Dyer-Witheford, and de Peuter see video games as an "ideal commodity" for explaining the cultural tensions inherent in capitalism's adjustment to digital technologies.[85] For these authors, the digital technology of video games allows new human experiences to turn into commodities for selling and consuming. In particular, Kline et al argue that video games "unlike television, do not depend on advertising revenue."[86] Rather, the early economic successes of individual video games require *investing* capital into advertising instead of *generating* capital through advertising. Both *Dragon Quest* and *Dragon Warrior* required paid ads to garner customer attention. In that sense, an audience's desire to purchase *Dragon Quest* required cultivation. Game producers needed to create excitement for a

[81] Ibid.
[82] Another visual example of this is the difference between the English spelling of Japan's capital, "Tokyo," and the kanji version of Japan's capital, "東京" which is only two characters. Note that each character takes up the same visual space in a video game, so that using English effectively requires five visual blocks, whereas the kanji only takes up two.
[83] Ibid., 223.
[84] As Kohler explains, the game name had to be changed because *Dragon Quest* was already the name of a table-top role playing game in the U. S.
[85] Stephen Kline, Nick Dyer-Witheford, & Greig de Peuter, *Digital Play: The Interaction of Technology, Culture, and Marketing*, (Montreal, Canada: McGill-Queen's University Press, 2003), 76-77.
[86] Ibid., 73.

video game the customer had yet to play through advertising techniques present in other media forms, including magazines and television commercials.

In Japan, *Dragon Quest* was advertised with a backdrop of the Famicom's commercial success and an audience familiarity with the artwork of popular manga artist Akira Toriyama. Toriyama's early manga, *Dr. Slump*, appeared on Japanese television.[87] Within this cultural context, *Dragon Quest* served as a recirculation of Toriyama's artistic style. When Enix advertised *Dragon Quest* to Japanese players, they appealed to Toriyama's preexisting celebrity by having him create drawings specifically for both ads and the box in which the game cartridge was sold. Advertising in *Shonen Jump*, a magazine that printed 4.5 million copies weekly, increased their potential consumer base, cultivating attention from the already-established popularity of Toriyama's comics like *Dr. Slump* and *Dragon Ball*.[88] However, these advertising strategies could not be relied upon in the North American context because most of the audience lacked familiarity with manga. Early translations of manga into the United States, for instance, often had any references culturally specific to Japan removed or re-contextualized to fit within North American cultural practices.[89] For the United States, manga would not become commercially popular until just after the turn of the century, in 2002.[90]

Not only did the language of *Dragon Quest* require translation, but developers needed to figure out the best ways to advertise the game in a new cultural context. The video game industry refers to this combination of adopting a video game's linguistic and advertising elements to a new national context

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[87] See "Akira Toriyama," *Anime News Network*, no date given. Accessed February 24, 2014 from http://www.animenewsnetwork.com/encyclopedia/people.php?id=12; "Dr. Slump –Arale-" *Toei Animation*, Retrieved February 24, 2014 from corp.toei-anim.co.jp; "Viz to Release Legendz and Dr. Slump Manga in 2005," *Anime News Network*, December 16, 2004. Accessed February 24, 2014 from http://www.animenewsnetwork.com/press-release/2004-12-16/viz-to-release-legendz-and-dr-slump-manga-in-2005.

[88] Sheff, *Game Over.* 69-70.

[89] Antonia Levi. "The Sweet Smell of Japan: Anime, Manga, and Japan in North America," *Journal of Asian Pacific Communication*, 23 n. 1 (2013): 3-18. Accessed June 11, 2015, doi: 10.1075/japc.23.1.02lev.

[90] Karou Misaka, "The First Japanese Manga Magazine in the United States," *Publishing Research Quarterly*, 19 n. 4 (2004): 23-30. Accessed June 11, 2015 from Library & Information Science Source, EBSCOhost; Casey E. Brienza, "Books, Not Comics: Publishing Fields, Globalization, and Japanese Manga in the United States," *Publishing Research Quarterly*, 25 n. 2 (2009): 101-117. Accessed June 11, 2015, doi: 10.1007/s12109-009-9114-2.

as "localization." As Mia Consalvo explains, "localization" refers to the process where video game developers translate a game to fit within the cultural parameters of the market it will enter.[91] Multinational corporations entertain notions of entering new markets to peddle their digital wares. Consalvo argues that multinational corporations introduce complex questions about culture, and that localization reflects a kind of cultural mixing wherein new culture forms. In Consalvo's perspective, this creates a cultural hybrid. She explains: "the culture, although hybrid, avoids becoming homogenous (perhaps is incapable of becoming homogenous) because the demands of the local still shape cultural products as they travel around the world."[92] Final video game products must incorporate rhetorical strategies designed to bridge cultural gaps, both in language and in marketing practices.

In addition, Consalvo notes that often technologies across national borders also differ, and that market demands "are managed through tightly controlled technological barriers such as regional encoding and technical formats that seek to reinforce disintegrating national or geographic borders."[93] The permeability of national and geographic borders leads to an additional rhetorical hurdle for Japanese video game developers, including Enix, because "Those products destined for global consumption are carefully localized, to ensure that their international flavor is not *too* foreign for non-Japanese tastes."[94]

In the United States, the responsibility of advertising was taken away from Enix. Nintendo had already crafted a specific brand identity in the West. Nintendo sought younger children as an audience, and thus focused on appearing as a "family oriented" company. Part of how this identity occurred through censoring of topics like sex, drugs or overly violent imagery. The most notable of these changes came in the form of rewriting a statement by one of the townsfolk to make it less vulgar. In

[91] Mia Consalvo, "Console Video Games and Global Corporations: Creating a Hybrid Culture," *New Media Society,* 8 n. 1 (2006): 117-131. Accessed June 10, 2015, doi: 10.1177/1461444806059921.
[92] Ibid., 120.
[93] Ibid., 120.
[94] Ibid., 120.

one town within *Dragon Quest*, players came across a woman offering a "pafu-pafu" for 50 gold pieces. "Pafu-pafu" in Japan referred to the sound of a woman rubbing her own breasts. While players could not actually hire this woman, the implications were clear. The reference was clearly culturally specific and did not translate well into the United States audience, who would be more likely to think of it in terms of the use of cannabis or tobacco products. But even if 'pafu-pafu' referred to smoking, it would have had to be edited out under Nintendo's branding strategy for the American market. In *Dragon Warrior,* a woman selling tomatoes replaced the woman selling "pafu-pafu."[95] Such filtering was an element of *Dragon Warrior's* circulation, as it allowed the artifact to *move*. Obeying Nintendo's content requirements allowed Enix to further circulate their game, even if it meant parts of the game were left behind.

Nintendo's appeal as a "family friendly" company highlights a capitalization of "pester power," the underlying logic that parents will purchase objects for children if only to stop or prevent the child from continuing to ask for it.[96] Mature topics interfered with gaining parental compliance to the child's request. The creation of the Robotic Operating Buddy, the small gray robot that helped Nintendo of America frame the console as a "toy," also sought to court children to play Nintendo games. Nintendo executives also paid for store displays, game competitions, and licensed game characters to other companies such as McDonalds.[97]

An extensive advertisement campaign accompanied Nintendo from the first days of its test marketing in New York, where the company spent $30 million on advertising in 1985.[98] Gail Tilden, a

[95] Kurt Kalata, "The History of Dragon Quest," *Gamasutra: The Art &Business of Making Games*. February 4, 2008. Accessed July 18, 2012 from http://www.gamasutra.com/view/feature/131926/the_history_of_dragon_quest.php.
[96] Kline, Dyer-Witheford, de Peuter, *Digital Play*. See also Margaret-Anne Lawlor and Andrea Prothero, "Pester Power-A Battle of Wills between Children and Their Parents," *Journal of Marketing Management*, 27 n. 5-6, (2001): 561-581, Accessed June 11, 2015, doi: 10.1080/0267257X.2010.495281. Accessed June 11, 2015, doi: 10.1080/0267257X.2010.495281.
[97] Ibid.
[98] Ibid., 119.

long-time Nintendo employee, arranged advertisements with a local ad agency to help garner attention for the product. Included in this advertising was a two-page spread in *New York Magazine* introducing a wider audience to R.O.B.[99] The games for the system itself were de-emphasized in this ad, and instead focus was placed on the material components like R.O.B., the light gun, and claims to superior graphics with 52 colors. Games did have a paragraph mention, but only two specific games were mentioned (*Duck Hunt* and *Gyromite*). Eventually, Nintendo advertised its games on television.

Nintendo also developed their own magazines and newsletters to promote their products in the winter of 1987. *Nintendo Fun Club* was a short-lived newsletter contained advertisements for Nintendo games, letters from game players, and tips for raising game scores or advancing past particularly difficult areas within a game.[100] The magazine *Nintendo Power* replaced *Nintendo Fun Club* in July 1988. The magazine promoted a phone bank that gave tips to players, offered teaser reviews of forthcoming games, explained new games and hardware to players, and introduced Americans to many of the role-playing games popular in Japan. By 1989, Nintendo Power had a well-established readership of roughly five million.[101]

More than anything, however, Nintendo's newsletter and magazine focused on the players and the act of playing. Each issue of *Nintendo Power* featured reviews of games, as well as high scores of players from around the U.S., profiles of "power players," and even interviews with celebrities that played Nintendo, like Wil Wheaton and Michael Dorn from *Star Trek: The Next Generation*.[102] The color and layout of the magazine appealed to children, with bright lettering announcing the title of the

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[99] Frank Cifaldi, "Nintendo's 1985 NES Launch: Retronauts Digs up the Very First NES Advertisement," *1Up*, November 19, 2009. Accessed May 9, 2013 from http://www.1up.com/do/blogEntry?publicUserId=6083368&bId=9010293.

[100] Frank Cifaldi, "The Paper Trail: Nintendo Fun Club News (Part 1)" *1Up*, 28 December 2009. Accessed May 10, 2013 from http://www.1up.com/do/blogEntry?publicUserId=6083368&bId=9014722. See also Frank Cifaldi, "The Paper Trail: Nintendo Fun Club News (Part 2)" *1Up*, 7 January 2010. Accessed May 10, 2013 from http://www.1up.com/do/blogEntry?publicUserId=6083368&bId=9015866.

[101] Kent, *The Ultimate History of Video Games*, 171.

[102] "Celebratory Profile: Wil Wheaton," *Nintendo Power*, 16 (1990), 87-88; "Celebratory Profile: Michael Dorn," *Nintendo Power*, 7 (1989), 94.

magazine coupled with often-cartoonish pictures of video game characters in action poses. Early issues of the magazine also included advertisements for Nintendo-related children's shows, such as October 1989's advertisement for *Captain N: Game Master*, a short-lived cartoon that featured several prominent characters from Nintendo games of that period. Nintendo's reputation was contingent on its ability to promote itself to children, and Nintendo took great strides to avoid angering the parents of their key customers.

With Nintendo behind the wheel of advertising, and having editorial control over *Nintendo Power*, Enix had little say in how *Dragon Warrior* was marketed to the United States audience. But this did not mean that Nintendo would not advertise the game. Instead, the three years of translation that *Dragon Quest* underwent meant Nintendo had ample time to build an audience for *Dragon Warrior*. Horii and Nakamura's *Dragon Quest* and the translation into *Dragon Warrior* took considerable work and dedication. Japanese kanji required careful translation into English text. Adding to the difficulty of this linguistic translation, Enix decided to have text in *Dragon Warrior* take on stylistic characteristics of Old English, including sentence structures reminiscent of Shakespeare. *Dragon Warrior* also featured graphical upgrades, where Enix developers took game visuals from *Dragon Quest III*, which had already released in Japan, and incorporated them into *Dragon Warrior.* These updates included subtle changes, such as the introduction of white borders between land and sea and more-detailed sprites for in game characters. Visual representations of characters differed in their ability to reorient themselves and face different directions, a trait the characters in *Dragon Quest* lacked. Technical upgrades also included a simplification of the command system and the ability to save games on the cartridge itself. Instead of requiring players to bring up an additional menu where they decide which direction they would attempt to speak to a character, players now simply talked to whichever person their character was graphically facing. The password system used in *Dragon Quest* gave way to the

more convenient ability to save one's game by talking to a king.[103]

The constraints on circulation brought about by the translation process meant that American players would not see the game until 1989, after many of the games that *Dragon Quest* originally competed with in the Japanese market had already entered the U. S. One reason for this was the timing of the game's release. In Japan, for instance, Shigeru Miyamoto's *The Legend of Zelda* was released in 1986, just a few months before *Dragon Quest*. In the United States, however, *The Legend of Zelda* was released in 1987, two full years before *Dragon Warrior*. By the time *Dragon Warrior* was released in the United States, Nintendo had already released *Zelda II: The Adventure of Link*, a sequel to *The Legend of Zelda*.[104] Nintendo's ability to translate these games quicker than Enix could translate *Dragon Quest* meant a larger market share for their games, and a saturated market for Enix.

Nintendo made use of this timing difference in the first U. S. advertisements of *Dragon Quest*. Nintendo's *The Legend of Zelda* was used to introduce players to *Dragon Warrior*. Advertising for *Dragon Warrior* occurred as early as winter of 1987, two years before its release, with a single page of *Nintendo Fun Club* explaining that if players enjoyed *The Legend of Zelda*, they would enjoy *Dragon Warrior*.[105]

Nintendo Power tried to generate enthusiasm for *Dragon Warrior* by boasting over *Dragon Quest's* massive popularity in Japan.[106] *Dragon Quest* marked the NES's "coming of age," the magazine declared, using big, bold graphics and illustrations to promote its visual detail and game depth.[107] To celebrate *Dragon Warrior*'s release, *Nintendo Power* advertised the game with a twelve-page spread in the 1989 July/August edition of their magazine. Additionally, the magazine explained to

[103] Kalata, "The History of Dragon Quest"
[104] The most likely reason for this is the fact that *Dragon Warrior* had significantly more text to translate.
[105] "Dragon Warrior," *Nintendo Fun Club News*, Winter 1987Accessed July 24, 2013 from http://www.retromags.com/publications/category/united-states/nintendo-fun-club-news#.VXo9XVIsBKg.
[106] "Dragon Warrior," *Nintendo Power,* May/June 1989. Accessed July 30, 2013 from http://www.retromags.com/publications/category/united-states/nintendo-fun-club-news#.VXo9XVIsBKg.
[107] Ibid., 53.

readers the general premises of the role-playing genre, such as leveling up, fighting monsters to build strength, and gathering information by talking to townspeople.[108] At times, the magazine relied heavily on text to explain concepts, typically with small, drawn images and a few screenshots that correspond to the concept. Maps of the starting castle and nearby village adorned its pages. Finally, the magazine provided readers a game strategy guide, inserted in the November/December issue, which featured screenshots and instructions on how to advance in play.[109]

But *Nintendo Power*'s relationship to *Dragon Warrior* was not simply a matter of generating market enthusiasm. The publication also contented with the relative complexity of *Dragon Warrior* compared to its sister game *The Legend of Zelda* and other, more action-oriented games available for the NES. *Dragon Warrior's* complex navigation of menus and commands did not fit well with Nintendo's young target audience. Although most articles in *Nintendo Power* used phrasing appropriate for children, the complexity of *Dragon Warrior* as a game required greater emphasis on textual explanation and narrative exposition. The advertisements attempted to educate readers on what literacies (technical and textual) were required to play the game successfully. The advertising strategies employed for Japanese audiences would not work for the much younger, and therefore less literate, U. S. audience.

Despite the effort, *Dragon Warrior* sold poorly. Total sales in the United States rose to roughly half a million units.[110] However, this did not prevent *Dragon Warrior* from circulating widely in North

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[108] "Dragon Warrior," *Nintendo Power,* July/August (1989): 39-50.

[109] Gail Tilden, Pam Sather, and Howard Philips, *Dragon Warrior Strategy Guide* (Redmond, WA: Nintendo of America, 1989).

[110] "Dragon Quest NES Sales" *VGChartz,* Accessed April 15, 2015 from http://dragon-quest.org/wiki/Worldwide_Dragon_Quest_Sales#North_America. While the game sold poorly, it did place on several of *Nintendo Power's* popularity charts, rising to 5th place in January 1990, dropping to 16th by October of that same year. See "Top 30," *Nintendo Power*, January/February (1990): 48-49; "Top 30," *Nintendo Power*, March/April (1990): 40-41; "Top 30," *Nintendo Power*, May/June (1990): 42-43; "Top 30," *Nintendo Power*, July/August (1990): 66-67, "Top 30," *Nintendo Power*, September/October (1990): 15-16. It should be noted that a video game selling this many copies does not make it a failure. Success is determined by the context of how many games were pre-ordered. The disparity matters because preordered games by Enix means potentially unsold games. Unfortunately, I have been unable to track

America. *Nintendo Power* offered *Dragon Warrior* cartridges as an incentive to purchasing a year subscription to the magazine, thereby circulating the game despite poor sales.[111] This circulation came at great economic cost to Enix, but great commercial gain for Nintendo. By offering *Dragon Warrior* as a promotional gift with subscriptions to *Nintendo Power*, Nintendo increased readership of its primary advertising vehicle and the appeal of its game system. But this tactic cheapened the significance of *Dragon Warrior* as a game franchise, and Enix would continue to have trouble selling the franchise in the United States. The ability of *Dragon Warrior* to circulate independent of its ability to earn profits for Enix resulted directly from the contractual relationships between Nintendo and its licensees.

Conclusion: How Dragons came to Roam America

Both 'texts' and 'commodities' circulate. A tension emerges, however, from the application of terminology such as "publics" and the somewhat opposing terminology of "consumer." Warner's discussion of publics highlights the role of reflexivity: "the notion of a public enables a reflexivity in the circulation of texts among strangers who become, by virtue of their reflexively circulating discourse, a social entity."[112] As Finnegan and Kang point out, Warner's emphasis on circulation as a constitutive element of a public relies on "an imagined scene of exchange between writers and readers, as well as a text as the vehicle for communication."[113] Even when expanding "text" to include visual elements, as Kang and Finnegan do, rhetorical scholars have tended to frame circulation as a civic phenomenon.

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down just how many *Dragon Warrior* games remained unsold by Nintendo.

[111] Bob Mackey, "Smart Bombs: Beloved Games that Flopped," *1up.com*, 5 February 2007. Accessed August 23, 2013 from http://www.1up.com/features/smart-bombs?pager.offset=0; Ben Kuchera, "How Nintendo Power Helped Introduce the United States to Console RPGs," *The Penny Arcade Report*, August 22, 2012. Accessed August 23, 2013 from http://web.archive.org/web/20120824233622/http://penny-arcade.com/report/editorial-article/how-nintendo-power-helped-introduce-the-united-states-to-rpgs; "50 Issues of Nintendo Power—A View from the Inside Out," *Nintendo Power*, 50 (July 1993): 36-39.

[112] Warner, "Publics and Counterpublics (abbreviated version)," 11-12.

[113] Finnegan & Kang, "'Sighting' the Public," 394.

The analysis of *Dragon Warrior* in terms of circulation, however, reminds us that video games are configurations of image-text, sounds, and programming that circulate among a different kind of social body: consumer culture. Within markets, "texts" circulate less according to the logic of reflexivity, and more according to the logics of market competition. As Kline and his coauthors suggest, the 1980s marked a moment where game developers thought of their market not as publics, but as boys between eight and fourteen years old.[114] Still, within this market context, there are still publics. The U. S. game industry enacted a public centered on the circulation of print magazines and particular video games. With the console industry in shambles in the early 1980s, Nintendo re-created this public through the use of marketing. Nintendo's introduction of the NES to the U. S. required the creation of a strong branding identity, and Nintendo established legal relationships and content-control practices to establish a reputation for producing "family" and "child-friendly" content. In the case of *Dragon Warrior,* this public lacked familiarity with Akira Toriyama, games were too sophisticated, and the text-heavy advertisements could not capture the attention of young gamers. However, unsold games and stringent contract language allowed *Dragon Warrior* to circulate despite low sales. Legal contracts and their technological enforcement encouraged *Dragon Warrior's* circulation among the gaming public, even as a slow translation process and mismatch between advertisements and their audience impeded process.

Circulation provides insight into *Dragon Warrior's* historical context as it becomes a commodity, just as genre provides insight into *Dragon Quest's* mixing of tabletop gaming conventions with aesthetics cultivated from maps, manga, and commercially produced music. Taken together, genre and circulation speak to the rhetorical decisions made before a game enters a market and irrespective of what players might actually do. However, I have yet to engage a central, important moment in the

[114] Kline, Dyer-Witheford, & de Peuter, *Digital Play,* 119.

gaming experience—the act of playing within a game world. In the next chapter, I examine the construction of *Dragon Warrior's* narrative and how that narrative is created through multiple rhetorical managements of game space.

CHAPTER THREE

Telling a Story, One Villager at a Time

In October 2012, video game journalist Jason Schreier published an article that discussed the different player experiences provided by modern role-playing games. At the center of his observations were player control and the ability to make narrative choices. Examining how Japanese game designers approach creating games, Schreier wrote, "They want to take you on a meticulously-scripted adventure with very little wiggle room. You might not walk away with stories to tell your buddies, but if a JRPG does its job, you'll walk away feeling some sort of powerful connection to the characters."[1] This style of narrative, however, also has its critics. For CRPG fans that had experienced the *Wizardry* and *Ultima* franchises, games like *Dragon Warrior* often felt different in how they tell stories. Historically, "The most common complaint [made by Western audiences] is that JRPGs are too linear, prodding the player from plot point to plot point; the player's ability to affect the narrative is tightly constrained."[2] This chapter examines how *Dragon Warrior* constructs a linear experience for the player by attending to the rhetorical strategies deployed by the game's designers.

While the last chapter examined some of the historical elements that went into circulating the JRPG *Dragon Quest* into the Americanized translation, *Dragon Warrior*, this chapter points to design decisions that support how this genre of games are interpreted as narratives. In other words, I explore the rhetorical strategies that lead a general player to their game play as a mode of storytelling. Engaging *Dragon Warrior's* story reorients current debates in game studies over the capacity of video games to tell stories. Ultimately, I argue that video games tell stories when producers employ rhetorical strategies that limit player agency in ways conducive to linear plot development. The central tension for

[1] Jason Schreier, "You Can Keep Your Big Open Worlds—I Want A JRPG," *Kotaku*, October 14, 2012, Accessed May 11, 2015 from www.kotaku.com.
[2] Matt Barton, *Dungeons and Desktops: The History of Computer Role-Playing Games*, (Wellesey, Massachusetts: A. K. Peters, Ltd. 2008), 208.

game developers is a careful management of space so that narrative time, and narrative coherence, can be preserved. For rhetorical critics and scholars of narrative, video games like *Dragon Warrior* exemplify how designers adapt themselves to the properties of a new medium in order to remediate older communicative forms.

I begin by summarizing the past debate in game studies over the ontological status of video games as *either* narrative or simulations. At the heart of the debate, I argue, is the question of how critics should interpret the role of audience action—a form of social-technical action—in a game. Critics of "narrative" approaches to game studies present the player's capacity to change events "inside the text" as something that renders narrative criticism inadequate. These authors emphasize player agency. I view player agency as a rhetorical constraint of digital technologies that make stories more difficult to tell. Examining the question in this way calls for attending to the modes of linearity established within the game world. These "modes of linearity" are rhetorical strategies meant to curtail and limit player freedom so that narrative can be "achieved" by the artifact. I examine the process of storytelling as it unfolds in *Dragon Warrior*, giving a detailed account of how story "appears" through the exploration of the game world. I then articulate the specific rhetorical strategies engaged within the game so that it could be "read" as a story. To conclude the chapter, I re-examine how these rhetorical strategies highlight tensions in rhetorical theory regarding the role audiences have in completing arguments, constructing texts, and offering their own interpretations of what they see and hear.

Video Games and the Debate about Narrative

New technologies do not necessarily reuse already existing discursive forms and narrative theorists have often engaged in debates about what constitutes narrative and how to distinguish narrative from other forms of communication. The *Oxford English Dictionary* traces the term "narrative" to 16th century France, where it was used to describe the parts of legal papers and their

purposes in court.[3] By the early 19th century, the term came closer to contemporary uses of term, in the sense that it refers to the parts of text dealing with representing sequences of events.[4] Modern scholarly definitions of narrative vary, and terminologies similarly cloud scholarly understanding. Philosopher Peter Lemarque explains that the term "narrative" often ambiguously refers to a story-as-object, the act of telling a story, or the end result of a telling itself.[5]

Such ontological problems over what the term "narrative" describes are neatly summarized by literature critic Marie-Laure Ryan. Drawing explicitly from semiotics, Ryan concludes that narrative definitions straddle three potential defining domains: the syntax of stories, the semantics of stories, and the pragmatic uses that stories have for their tellers and audiences.[6] Disagreements on narrative syntax center on treating narrative in terms of grammatical components. For Ryan, scholars disagree about narrative syntax when they offer competing ideas of what elements must be present, and in what order, for an artifact to "be narrative." Addressing narrative definitions in terms of semantics runs into similar problem. To center definitions of narrative upon semantics means to attempt addressing how a narrative relates signs and meanings. The problem deals with how narrative exists because of already existing relationships between images, text, or sound and their corresponding meanings. Ryan calls to the function of texts and images in the semantic domain, writing "it is because we know what words mean that we can make sense of written or oral stories, and it is because we know what images represent that we can make sense of a comic strip or a silent movie."[7]

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[3] *Oxford English Dictionary Online*, s.v. "narrative." Accessed December 26, 2014 from http://www.oed.com/view/Entry/125146?rskey=77L7f2&result=1&isAdvanced=false#eid.
[4] Ibid.
[5] Peter Lemarque, "On Not Expecting Too Much from Narrative" *Mind & Language*, 19 n. 4 (2004), 393-395. Accessed June 25, 2015; doi:10.1111/j.0268-1064.2004.00265.x.
[6] Marie-Laure Ryan, "Toward a Definition of Narrative," in *The Cambridge Companion to Narrative*, ed. David Herman, (New York, NY: Cambridge University Press, 2007), 22-27.
[7] Ibid., 25.

Ryan identifies a third domain for defining narrative that appeals to the practical purposes this form of communication is thought to have. Once again, Ryan points to the problem with looking toward narrative "uses" as a feature of defining it. She writes, "The claim that narrative is a particular type of use is further defeated by the fact that narrative itself can be put to many different uses: telling a joke to entertain an audience; reporting current news; confessing one's sins to a priest; testifying in court; reading a story to a child at bedtime, and so on."[8] Ryan's project transcends arguments over the definition of narrative by pointing to the numerous weaknesses. Defining narrative in terms of syntax risks restricting narrative to a set of narrow grammatical rules, while defining narrative in terms of semantics risks neglecting the multiple levels of meaning (from word, to sentence, to visuals, and so on) that comprise mediated communication. Defining narratives under goals, or the pragmatic purposes of stories, becomes impossible because of the multiple goals a story can have in different contexts.

Instead of these options, Ryan offers a "fuzzy set" of narrative requirements and points toward how individual definitions set different criteria for categorical membership.[9] By offering these criteria, Ryan explains that scholars emphasize particular constitutive elements when defining what a narrative is. The criteria incorporate narrative "requirements" argued over by numerous scholars: a spatial dimension, a temporal dimension, a mental dimension, and formal and pragmatic dimensions.[10] Scholars might have stringent requirements over narrative, emphasizing and demanding that narrative meet standards under all four criteria, or a scholar might have a relatively lax definition of narrative and require a text meet only one or two criteria. The argument over whether video games tell stories or not, and the appropriate terms to use when analyzing stories, can similarly be organized around the metacritical terms that Ryan provides. Approaching the "narrative vs. ludology" debate through this

[8] Ibid., 26.
[9] Ryan specifically uses the terminology "fuzzy set," as her goal is not to provide the ontological truth regarding what narrative is, but to show how scholars operate with very different understandings of the term. The "fuzzy set" serves a metacritical purpose, pointing to the distinctions and assumptions made by scholars that discuss narrative.
[10] Ibid, 29.

semiotic perspective reframes the conversation from "Do video games tell stories?" to "What is it about video games telling stories that frustrates the creation of narrative?"

Recognizing the diversity of narrative definitions and how each emphasizes different components of storytelling provides insight into the arguments made against video games "being narrative." In fact, using Ryan's semiotic unpacking of narrative definitions demonstrates a key limitation in the scholarly work of two central ludologists, Epsen Aarseth and Gonzalo Frasca. Both authors limit their conception of narrative along syntactic grounds—a certain "grammar" of narrative must be followed for games to "tell a story."

At the center of the argument against treating video games as narrative has been literary critic Epsen Aarseth. The characteristics of new technologies, particularly computer programs, led Aarseth to reject narrative analysis.[11] Aarseth separated the act of narration (describing events) from the events themselves unfolding, resulting in a substantial split between action taking place and discourse about the action. Aarseth concluded, "If we concur...that narratives comprise two kinds of representations, description and narration, and that description is always subordinate to narration, then we may conceptualize the difference between narratives, games and hypertexts."[12] Games like football only have one level of representation, that of the actual choices made by players. Such choices were "ergodic, which implies a situation in which a chain of events has been produced by the nontrivial efforts of one or more individuals or mechanisms."[13] Ergodic texts, in Aarseth's view, required the player's participation in order to make them into an actual narrative. Drawing upon the hypertextual book *Afternoon,* where readers typed commands to a computer screen and answered questions so they could "read" a story, Aarseth explained that a player could sabotage the story and produce nonsense by typing in random and unrelated commands. Traditional literary criticism, then, could not account for

[11] Epsen Aarseth, *Cybertext,* (Baltimore, MD: John Hopkins University Press, 1997), 3.
[12] Ibid., 95.
[13] Ibid., 94.

the behavior of the audience and their capacity to upset or act differently from the expectations of digital authors. Ultimately, close textual analysis of the cyber-book *Afternoon* would seem to run aground on such unanticipated and contrarian uses of the technology.

Aarseth's critique of literary methods and theories for the criticism of hypertext led other scholars to provide new tools for video game analysis. In particular, Gonzalo Frasca extended Aarseth's theorizing and called for critics to recognize that video games operate under a symbolic logic of simulation rather than that of representation. Frasca wrote, "Traditional media are representational, not simulational. They excel at producing both descriptions of traits and sequences of events (narrative). A photograph of a plane will tell us information about its shape and color, but it will not fly or crash when manipulated."[14] To Frasca, the key element of video games as rhetorical forms was their ability to show different events through multiple playing sessions. A video game, because of its reliance on player action, might unfold differently each time played. Because certain events may never occur during one play-through, Frasca argued that a reliance on traditional textual analysis was futile; players might never see the same story.

Both Aarseth and Frasca implicitly invoked a syntactic domain of defining narrative in their arguments against video game narrativity. For Aarseth, computer programs such as *Afternoon* operate outside the bounds of narrative because of the capacity for players to upset the linearity of the story. Because the technology demanded player input in order to proceed, the discursive and communicative flows of the text were disrupted. Frasca took the syntactic element of narrative and increased its importance, emphasizing that because the player acts upon the representative capacities of the game with their own decisions, they create alternative stories.

[14] Gonzalo Frasca, "Simulation versus Narrative" In *The Video Game Theory Reader,* eds. Wolf, Mark J. P. and Perron, Bernard, (New York: Routledge, 2003), 223. Accessed June 25, 2015 from http://interactive.usc.edu/blog-old/wp-content/uploads/2011/01/Simulation_vs_Narrative.pdf.

However, in other respects, Frasca redefined video games as narrative in semantic and pragmatic senses. In examining the role of narrative and simulation in games, Frasca drew a distinction between two types of game modes, *paida* and *ludus. Paida* games referred to games with open-ended structures, such as a child playing make-believe, and *ludus* referred to games with a clear winning and losing state.[15] Thus he argued that "the *ludus*' binary logic stands out when delivering games set in fairy-tale-like environments, where things are generally black or white."[16] However, "When you move onto other topics such as human relationships, suddenly distinctions are not so clear-cut. Only *paidia*, with its fuzzier logic and its scope beyond winners and losers, can provide an environment for games to grow in their scope and artistry."[17] Following this logic further, Frasca examined how *ludus* games function to enforce moral certainties, where desirable outcomes map onto winning and "less preferable" outcomes become mapped onto losing.[18] Frasca's distinction between *paidia* and *ludus* implicitly introduced semantic and pragmatic understandings of games as narrative. To follow Frasca's logic is to recognize that *ludus* games have more practical application because they can make specific moral arguments. Therefore, *ludus* games have closer relationship to how "traditional" narrative functions.[19] They more closely matched traditional narrative because they mapped onto traditional narrative's assumed purposes.[20]

To augment the current practices of video game criticism, Frasca turned to rules, which do important rhetorical work in a medium dependent on them.[21] To encourage critics to examine rules, he posited four levels of rule analysis. Initial analysis can focus on the representation level, where Frasca

[15] Ibid.
[16] Ibid., 229.
[17] Ibid.
[18] Ibid.
[19] Ibid., 226.
[20] Ibid., 230.
[21] Frasca's use of the term "ideology" merits special attention, as the term has multiple connotations in academic discourse. However, rather than engage the richness of the term, he seems content to equate "ideology" simply with "political stance." This level of detail for the term seems effective enough for his goals within the article; however this might be an area where his argument could become more refined.

sees narrative analysis as a potentially fruitful approach. Narrative, in this approach, is best suited for how things appear. The second level of rule analysis concerns the set of possible actions within a game, such as jumping, running, or casting spells. He labeled this set "manipulation rules," which are distinguished from a third level of rules that govern the achievement of in-game accomplishments, or "goal rules." The fourth level of rule analysis considered the ability of players to manipulate previous rules within the game, or what Frasca labeled as "meta-rules."

As a result, two differing perspectives came to dominate game studies: those that argued rule systems were paramount in interpreting games (ludologists) and those that offered traditional narrative analysis of the stories that games told (narratologists). In 2006, Ian Bogost responded to the debate between narratologists and ludologists by suggesting that the two extremes of each position both missed the point.[22] Reframing the debate, Bogost wrote, "A reformulated version of the question of ludology versus narratology might ask if games need to produce stories, while acknowledging that they might be able to do so."[23] Instead of emphasizing story over rule system, or vice versa, Bogost offers the concept of "unit operation." He defines a unit as "a material element, a thing. It can be constitutive or contingent, like a building block that makes up a system, or it can be autonomous, like a system itself."[24] In explaining the second part of his terminology, operations, he writes, "an operation is a basic process that takes one or more inputs and performs a transformation on it. An operation is the means by which something executes purposeful action."[25] Taken together, "unit operations" calls for a mode of criticism that looks for individual material elements of a discourse and evaluates how they are transformed in different contexts. Such a perspective, in Bogost's view, integrates an approach to video games which incorporates both narratology and ludology perspectives.

[22] Ian Bogost, *Unit Operations: An Approach to Videogame Criticism,* (Cambridge, MA: The MIT Press, 2006).
[23] Ibid., 70.
[24] Ibid., 5.
[25] Ibid., 7.

Bogost's introduction of "unit operations" offers a way around the either-or distinction between simulation and narrative by providing language to address the individual components that make up an entire video game. As a concept, "unit operations" offers a way out of the terminological and ontological mess of defining "narrative" and "simulation" as categorically opposed. Bogost's argument is similar to Ryan's prescription to thinking about narrative as a fuzzy set of requirements determined by a theorist. Bogost's terminology allows a way of recognizing that arrangements of specific game components, or "units," may, or may not, end with a "narrative." The component parts of a system, in Bogost's view, might result with the audience understanding a story, or they might not. It is not the ontological status of video games as either narrative or simulation that is important, but rather the arrangement of parts in individual games. "Arranging" here requires both the game and the player.

In *Dragon Warrior*'s case, sense-making falls within the limitations and possibilities of the video game as a medium of communication. Game developers engage with the effectiveness of a video game for communicating ideas, even when those ideas require a sequence of events potentially disrupted by player action. The critical question for game developers becomes how to make the story within a video game *coherent* when events could occur out of sequence because of player's following contingent events and propositions. In my refiguring of the "narrative" versus "simulation" debate, developers successfully create narrative in a video game when they successfully employ semantic and formal strategies that establish linearity within the artifact. Linearity, in this case, does not mean that all narratives must have the same temporal structure. Instead, developers must make design decisions that help players recognize where their actions appear in a series of events. Linearity speaks to the capacity of designers to anticipate the player's responses to in-game challenges, navigations of the game space, and what decisions players have available to them. I am not arguing for a reductive definition of narrative as merely linearity of events. Rather, it is the capacity for the player to upset the order of

events unfolding within a game world that potentially disrupts the ability of designers to tell stories. Narrative linearity appears as particularly important in video games primarily because the technology itself provides so many ways for the audience to rearrange the order in which events occur.

The following section provides a walkthrough of the gradual unfolding of narrative within *Dragon Warrior*. This description provides readers a clear understanding of how players encounter these moments of narrative, and how players come to understand the events they participate as having coherence in spite of their ability to alter the order they encounter events within the game. This summary emphasizes the options that appear during game play, and instead of emphasizing the type of player and what they would do, I instead emphasize the pathways of action created by the game developer. Thus, the "game player" is de-emphasized to highlight elements of the game world. After summarizing *Dragon Warrior* and the story that emerges through game play, I point out several different rhetorical strategies that organize *Dragon Warrior* temporally.

Summarizing *Dragon Warrior*

Dragon Warrior begins with the player selecting the option to start a new quest from the title screen and then entering a name. After naming the character, play then immediately shifts to King Lorick's throne room, wherein the king commands the player, as a descendant of the hero Erdrick, to listen to his words. The king explains how Erdrick once fought evil with a magical ball of light, and then explains that the Dragonlord, the primary antagonist of *Dragon Warrior*, stole the ball of light and it is up to the player to recover it. The king instructs the player to take the treasures in the throne room and talk to guards that he or she meets along the way.

When talking to the guards, one asks the player if they had heard about the princess. If the player answers "no" (by selecting it from a pop-up window), the guard explains that the princess has, indeed, been kidnapped. Another soldier tells the player that a nearby town has weapons and armor for

sale and that sleeping at an inn will recover health lost in battle. After taking the treasures, and opening the door to the throne room with a found key, the player is then free to roam about Tantegel Castle. Exiting the throne room brings the player to the main area of Castle Tantegel, where the player encounters more characters, including more soldiers and knights, several merchants, and general townsfolk. A few merchants speak of how the Dragonlord has killed their fellows and even gone as far as to destroy an entire town. Some townsfolk explain how the nearby town of Brecconary was once a paradise before the Dragonlord appeared. Another townsperson explains that the player must fight many monsters before being able to explore the world more fully.

After speaking with the townspeople gathered in Tantegel, the player leaves the castle and is brought to a map of the countryside surrounding Tantagel and Brecconary. The player can see another castle across a small sea. However, there does not appear to be a direct route to the castle, and there is no sea travel available to players. A town, called Brecconary, sits just east of Tantagel. Soldiers encourage players to enter the town, purchase items, and seek rest if injured. Several townspeople greet the player, and the player learns several things from them. The player finds out the castle across the sea is Charlock, home to the Dragonlord and the end of their quest. Players also hear of another town that can be reached by heading north and following the shore west. Should the player immediately head in that direction, they quickly find monsters too strong to defeat. At this point, players typically focus on fighting weaker slimes and red slimes to gain levels and earn gold to buy better equipment.

Both Tantegel and Breconnary have areas that cannot be reached initially because doors block the player's movement. As indicated by the soldier in the throne room, these doors can only be removed by using a magic key, and these keys can only be used once. A citizen of Breconnary mentions to players that there is a town that sells magic keys, which is a cue for the player to search out this town. Until these doors are opened, players cannot talk to the villagers on the other sides of the doors,

nor can players gain access to the treasure chests they see within those rooms. By the time players leave Brecconary and Tantegel, the game has explicitly established two goals—finding the princess and defeating the Dragonlord—through statements made by residents in these locations. Finding the town where the magic keys are sold, however, is a third goal implicitly suggested to players through both text and game visuals. The overhead perspective granted the player in Tantagel's courtyard allows one to "see" over the castle's walls and into rooms behind locked doors. Behind these doors are rooms with treasure chests and active villagers. However, without more magic keys, the player cannot gain access to the treasure chests or the information these villages might have. Villagers in Brecconary warn players to beware crossing bridges. Although the village does not explain further, players find tougher monsters across bridges.

Once the player has gained enough levels, they can begin journeying toward the northwest town. On the way, the player finds a small cave, which surprisingly lacks enemies. As players explore the cave they find a chest with a tablet inside. This tablet has been left by Erdrick, the player's ancestor, and explains that the player needs three items to reach the southern island upon which the Dragonlord's castle lies. Erdrick left these items to three different individuals, but the tablet leaves no hint to who these individuals are, what the items were, or how to find the individuals. Exiting the cave with this information, players can then continue toward the new town, called Garinham. This village, built by a wandering minstrel named Garin, contains even more information for players. One old man villager explains that the princess was hidden in a cave to the east. The player finds yet another door, marking another area needing a magic key to explore.

As a player explores, levels, and eventually becomes brave enough to cross several bridges to the east of Garinham, he or she comes to the town of Kol. In Kol, villagers describe a dreadful Golem that can be put to sleep by music. Similarly, the southern island contains dreadful monsters and a town,

called Rimuldar, where one can buy magic keys. Kol also has a room with an old man that cannot be entered without a magic key. Should the player explore the region around Kol, they shall find a man in a small cave that offers to test the player. He states, "There is a Silver Harp that beckons to the creatures of the Dragonlord. Bring this to me and I will reward thee with the Staff of Rain."[26] Hints for the silver harp are not forthcoming, so the player must explore, level up, and buy better equipment before heading to the southern island in search of magic keys. En route to this island is a small cave in the swamp south of Kol, which could, based upon the information gathered so far by the player, hold the princess. Thorough exploration of this cave requires confronting a powerful dragon. At this point in the game, a player is likely unable to defeat such a fearsome creature. Even if the player has accumulated enough power to take down the beast, he or she finds another locked door.

The cave south of Kol contains both the passage to the southern continent and a locked door. Once the player has traveled through the cave, the player can travel to Rimuldar to purchase magic keys. While in this town, a villager explains how Erdrick once made a rainbow on the northern part of the island. This same villager also mentions a secret entrance in the Dragonlord's room. A soldier hints that there are Stones of Sunlight in Tantegal castle. Another old man muses about a magic temple south of the town where the sun and the rain meet. The southern temple houses a man that refuses to help unless the player proves they are descended from Erdrick.

After buying a set of magic keys in Rimuldar, one can unlock several doors around Rimuldar. Doing so leads to a man named Howard that informs the player that he hid a magic item several steps south of a fountain in Kol. With a set of keys in hand, players can now travel to the areas of Tantegel, Garinham, Kol, and the channel cave to explore behind the locked doors. Access to new areas of Tantegel, allows the player to begin searching for the Stones of Sunlight. Opening the door within the

[26] Yuji Horii and Koichi Nakamura, *Dragon Warrior*, (Tokyo, Japan: Enix Corporation, 1989).

castle provides villagers with new information, including the location of an important grave. A townsperson man standing behind a set of traps states that one must "push on a wall of darkness" in the town to find Garin's grave. A woman also tells the legend that when rain and sun meet, a rainbow bridge will appear. The player finds another soldier who claims the cellar of the castle is difficult to find. By walking around the outside of the castle walls, players can find a staircase leading to the cellar. Within this room, an old man tells the player that he has been waiting for someone to give the Stones of Sunlight.

Garinham presents a different challenge on the other side of the locked door. Within this room, the player sees several treasure chests that hold innocuous items, additional villagers, and a locked door with two more soldiers on the other side. The soldiers reveal nothing, but several of the townspeople help by revealing important information. One villager speaks of the town to the south called Hauksness. Another man tells the player that they should make a map if they travel in dark areas. An older gentleman explains to the player that Erdrick's armor had been hidden ages in the past. By taking the advice of the soldier behind the locked door in Tantegel, the player pushes against the northern wall in this room to find the grave of Garinham. Doing this reveals a false wall and a small path leading to an old man and a dungeon. The old man explains that the silver harp within the gravesite attracts monsters, and that the player should avoid that location. When the player decides to enter the dungeon, he or she eventually stumbles upon a chest containing the silver harp deep within the cavern. Once the player returns the harp to the old man that requested it, he leaves players the Staff of Rain.

Just as these previously visited locations have new areas to explore, so too does the cave connecting the north and south continents. Once a player has beaten the dragon and opened the locked door on the other side of his location, they find the kidnapped princess. The princess asks if the player will escort her home. When the player says "yes," the character then carries the princess with him as he

travels. The princess does not, however, contribute in random battles. When returning to Tantegel and talking to the king, the princess gives the player a special item that acts as a compass, letting the player know how many steps they are from Tantegel castle.

Traveling all the way to the south of Tantegel, one eventually comes to the destroyed town of Hauksness and the castle town of Cantlin. Hauksness differs from other towns in *Dragon Warrior*; the village is full of the Dragonlord's minions and a player encounters terrible wizards, dragons, and other beasts that killed the village's people. Cantlin, on the other hand, is guarded by a strong golem that players heard about in Kol. A player that has found the flute hidden by Howard in Kol can play music to put the golem to sleep by using the item in battle. Entering Cantlin provides additional clues to help the player progress. One man tells how Erdrick's armor once belonged to a man named Wynn. Another man states how Wynn once buried an important item behind his shop under a tree. A third man, who lives behind a locked door, tells how Wynn owned a shop in eastern Hauksness. A man hiding behind locked doors and a dangerous barrier gives the coordinates of a location to search for evidence of being Erdrick's relative. By traveling 70 steps south and 40 steps east of Tantegel, the player can find proof of their heritage through Erdrick's token. Once the token, the Staff of Rain, and the Stones of Sunlight have been collected, the player takes these items to the shrine south of Rimuldar and receives the Rainbow Drop. The rainbow drop creates a bridge when used just north of Rimuldar, which allows the player to reach Charlock Castle, where the Dragonlord waits.

Before players embark to confront the Dragonlord, however, hints from multiple townsfolk in Cantlin suggest looking for Erdrick's armor in Hauksness, while rumors in Rimuldar suggest searching for Erdrick's sword in Charlock Castle. Traveling to Hauksness, players find a fierce Axe Knight guarding the tree behind one of the shops. When a player searches that spot, they find Erdrick's armor. Erdrick's sword, on the other hand, requires traveling through the maze-like Charlock castle. Although

several townspeople in Rimuldar suggest searching behind the throne room in the castle for a secret passage, players can explore two different wings of the castle that serve only to disorient and mislead players. Erdrick's sword lies behind the throne, and players can find it on the way to fighting the Dragonlord. Once the sword is in hand, players can then travel to the deepest level of Charlock castle to confront the Dragonlord. The Dragonlord, however, asks the player if they would like to share the world with him. At this point, players may say "yes" to the Dragonlord's offer, the screen freezes after the Dragonlord states he will put the player to sleep. If the player says no, the Dragonlord engages them in battle. Halfway through this encounter, the evil wizard shows his true form as a terrible giant dragon. If the player is victorious, the player warps outside of Charlock castle after the ball of light sweeps all evil from the land. The player then heads back to Tantegel castle.

At this point, the game prevents all random monster battles, and the player can roam the world. One can visit each of the towns traveled to over the course of the journey, and all townsfolk either shout "hurray" or offer thanks for bringing peace to the kingdom. Once one decides to return to Tantegel castle, soldiers instruct the player to visit King Lorick. Walking toward the throne room, the player is confronted with a line of soldiers and the king stands in the courtyard. Upon seeing the hero, the King states that it is the player's right to rule over the kingdom. The player character states a desire to find a new land to rule. Princess Gwaelin asks to join the player on their journey. Once the player agrees with Gwaelin's request, the player's image changes to when he rescued the princess and the soldiers begin playing trumpets. The end credits then begin rolling as cheerful music plays.

The above overview of game play and narrative development shows how, in general, the story of *Dragon Warrior* progresses from beginning to end. Yet, between the moments where the narrative progresses are hours of monster battles, where the player takes on single enemies in combat. A summary of this story, then, neglects the individual fights that punctuate story advancement, the

potential of a player to get lost between villages or in caves, and potential player deaths. In the next section, I unpack how game mechanics of random battles, dispersed narrative information, and player exploration serve to propel players along a specific narrative trajectory, one where players enter new regions and have their exploration directed through the information gleaned in towns. *Dragon Warrior* communicates narrative through elicited player exploration, even as the in-game geography directs players along specific paths and establishes linear progression.

Storytelling through Text, Image, and Space

Following Frasca, rule analysis of *Dragon Warrior* provides some critical explanatory power, but it similarly exposes problems with approaching critical interpretation solely on rules. On the manipulation level of rules, *Dragon Warrior* provides players with the ability to travel between multiple towns and game areas, to fight monsters using weapons or spells, and to open doors with magic keys. Frasca's "manipulation rules" point to the abilities of the player to navigate the world of Alefgard. The goal rules operating within the game further instruct players that to win, they must engage and defeat the Dragonlord. Failing to accomplish the goal, occurs when a player's hit-points drop to zero or below and they "die." To die in this context simply means being warped back to the starting castle and losing half of the player's gold. Enix did not provide many "meta-rules" in that players could not manipulate or alter any already existing rules within the game without resorting to cheating. While this kind of analysis provides new vocabularies for identifying the elements of *Dragon Warrior*, it cannot unpack how narrative becomes established. Often the different "levels" of rules are collapsed; one particular rule may operate at multiple layers simultaneously. Take, for instance, the townspeople found throughout *Dragon Warrior*. On a representative level, these townspeople are virtual citizens attempting to survive in a hostile world. However, coupled with these townspeople are sets of manipulation rules—players cannot move through them, but they can use the "talk" command to

retrieve valuable information. Additionally, these townspeople also operate in establishing goal rules, particularly as they communicate subsets of goal rules to the player, often indicating and providing the objects players need to complete their journey and confront the Dragonlord.

Dragon Warrior also requires attending to a host of related, and optional, documents which serve to frame the narrative of the game before players even enter the game world. In this sense, a player can engage narrative snippets from *Dragon Warrior* before playing the game by reading the instruction manual that accompanies the game, or through reading summaries about the game in *Nintendo Power*. The narrative elements in the instruction manual and advertising in *Nintendo Power* serves as a vehicle for introducing player's to their role world of Alefgard. Storytelling can come in the form of two pages within the manual that describe Alefgard's history.[27] This passage explains that once, a long time in Alefgard's past, it was "cloaked" in darkness until the hero Erdrick appeared and gave balls of light to the then king of Alefgard, King Lorik. After several generations of peace the evil Dragonlord stole the balls of light and darkness once again fell upon the land. The booklet also explains how the Dragonlord's monsters hunted travelers. Those following the Dragonlord's rule would destroy even entire towns and villages. Although many soldiers attempted to retrieve the balls of light from the Dragonlord's keep, they all failed. Eventually, the great prophet Mahetta claimed that a descendant of Erdrick would appear to defeat the Dragonlord. The manual ends this exposition by asking, "Who is this brave soul? There is only one possible answer. You."[28] In *Dragon Warrior,* the manual functions as narrative re-enforcement that highlights the "weakness" of narrative in video games. After all, how many other media narratives, such as film or novels, require the audience to engage with a separate booklet that explains how to "read" the artifact? I argue, however, that a video game actually enables

[27] Nintendo of America and Enix Corporation, *Dragon Warrior Instruction Booklet*, (Redmond, WA: Nintendo of America, Inc., 1989), 5-6. Accessed October 26, 2013 from http://www.woodus.com/den/gallery/graphics/dw1nes/manual/dw1nes_manual.pdf.
[28] Ibid., 6.

the emergence of a much stronger narrative form when the player engages the video game directly.

The rest of the manual explains to players how to navigate the game's interface and the various commands players can perform in game. Players that have read the manual's story pages find that the first scene in the king's throne room repeats much of the information displayed in the manual. Like the manual, the king's short speech identifies the player as Erdrick's descendant, and explains that the Dragonlord had stolen the ball of light. The king's speech, explains to the player which actions they must do in order to leave the throne room. This first plot point does much more than simply ingratiate players within the game world; however, as the throne room presents players with an important set of commands that frame the rest of the game's narrative development. Players are told that they must open the door, and that to do so a magic key is required. Soldiers direct players that each magic key has a single use, and players recognize the door because of its iconic gray image, comprised of a small set of domed doors with a small arch. The door icon similarly had a red bar across it, indicating its closure to the player.

After players leave the throne room, they then enter the rest of Tantegel Castle and become immediately aware of the presence of multiple individuals with whom to talk. These conversations form the bulk of how narrative reaches players, and players have an important role (selecting the talk command) making sure these steps are performed. The king, of course, also commanded interacting with Alefgard's citizenry. The constant conversations with townsfolk required players to make use of the talk command repeatedly, and the information given to them by townsfolk is not always useful, direct, or timely. For example, in Erdrick's cave, the player lacks specific instructions or names of individuals that have Erdrick's important items. In fact, as a player progresses, there are multiple objects that might fit this role, including the Staff of Rain, the Stones of Sunlight, the Rainbow Drop, both Erdrick's Sword and Armor, Erdrick's Token, Gwaelin's Love, and so forth. Part of the game's

appeal, of course, is the vague quality of the storytelling. In fact, by delivering the story piecemeal through multiple townspeople and villagers, *Dragon Warrior* requires players to piece together the plot through the sequence of their own exploration. By having players interact with townsfolk to find details about where they should go next, *Dragon Warrior* enables the very-linear production of text to be broken into non-linear sections, each of which direct players toward new game goals and thereby progress the story in a particular direction.

An early example of this narrative directive comes in the form of a man standing in Brecconary that tells players the location of Garinham. The man tells the player character to, "Go north to the seashore, then follow the coastline west until thou hath reached Garinham." The statement comes in the form of an imperative: the villager *tells* the player what must be done. But the player is not given a reason to move in this direction by the statement itself. Players typically would have interacted with other townsfolk that would set motivations for exploring other towns. For instance, the directive to find Garinham occurs in the same geographic location that players learn about a town where they can buy magic keys. Separately, these two pieces of information do little to advance the storyline within *Dragon Warrior*. Yet, together, these statements provide narrative reasoning for heading to Garinham, as players that had yet to travel to the town do not necessarily know if the town is the one with magic keys or not.

Because statements by game characters are bits of text strewn across Alefgard and they provide important game information, it behooves the player to take careful notes. Note taking allows the player to link together pieces of information and integrate these clues to advance temporality within the game. Several of these clues, however, remain separated by large chunks of game play. For example, the game provides tips on how to defeat the golem, a fierce guardian of the town of Cantlin far to the south of Tantegel. In the village of Kol, players begin hearing rumors about the monster, including that fairies

knew how to put the beast to sleep. However, the information players first come across in Kol does not connect the golem to Cantlin until players return with a magic key. Upon opening a door in the western portion of the village, players meet an old man who asks them if they have found the magic flute yet. When players answer "no," the man tells them that a man named Howard went had it before he left for Rimuldar. If the player answers yes, the man tells them to head to Cantlin, which implicitly suggests they will run into the golem en route.

The information given by an individual villager does not provide players with a complete enough picture to indicate what actions are necessary to progress the story. Rather, storytelling appears to players in the form of mosaic. A player must piece together the information in a way that is coherent within the game world. Players are certainly free to negotiate this information in a variety of ways. Outside help from other gamers and *Nintendo Power* aided some players to move through the game without talking to every single villager. Indeed, several villagers actually provided useless information that served as "texture" for the different environments the player finds. In Rimuldar, for instance, players find two villagers on opposite sides of town. One of those villagers, named Orwick, states he is waiting to meet his girlfriend for dinner. On the exact opposite side of town, a woman complains of hunger and Orwick's lateness. While this information does not assist the player in understanding or solving the problems afflicting Alefgard, it does subtly hint to players how they should go about locating important game items. In this case, the individuals the player encounters are standing at the edge of town, on the outside of a moat that surrounds Rimuldar. In this same town, players find a guard that tells them about an important item, the Stones of Sunlight, located in Tantegel castle. By noting the position of the couple meeting on opposite sides of the town, players might realize that finding the stones of sunlight in Tantegel requires a similar strategy even though such a leap of interpretation is not directly or explicitly stated by characters in the game. Players must explore the furthest edges of the

castle in order to find the basement, and before they can do this, they must first have obtained a key from Rimuldar's key merchant. This same town also provides information about what the player should do once they have found the stones of sunlight. A man in the town asks players if they have found a magic temple, and when they answer how they have; the man explains that the temple is a place where "sun and rain meet."[29] Players must deduce that they need both the staff of rain and the stones of sunlight together to move forward in the game. The components for the rainbow bridge are also explicitly told to the player in Rimuldar.

In these moments, *Dragon Warrior* presents its player with sets of information meant to guide player behavior toward new narrative foci. Townspeople sometimes tell a player explicitly what to do through warnings or instructions. At other times, key information remains unstated, and a player must fill in missing points of reference through clever use of enthymeme, as in the case of the old man directing players that have found the magic flute to go to Cantlin (and thereby put the Golem to sleep). In each step of the journey, however, players must deliberate on where to explore, how to navigate the geography effectively, and deduce whether they are strong enough to cross bridges into new dangerous territories. Each moment where players encounter new information, then, provides players with more complete information on which to deliberate and make decisions.

The structure of *Dragon Warrior's* narrativity appears linear and straightforward when reading it upon the page. However, in playing the game, the structure of the story requires the piecing together of information, particular actions performed by the player, and at times, specific in-game objects. The transformation from "weak narrative" to "strong narrative" follows a simple formula which is made clearer upon revisiting Ryan's use of semiotics to understand narrative. Games provide a "grammar" for interpreting what one can do and how one can accomplish their goals. The player supplies a

[29] Horii and Nakamura, *Dragon Warrior*, Old Man in Rimuldar.

motivation to complete the game within these syntactic parameters. When a player interprets text and visuals "properly," and performs actions in concert with the goals coded within those rules, the resulting interaction between player and game is a story. When the player rejects the in-game goals, however, story cannot be "achieved" in this interaction. The player has chosen not to provide the necessary performance, and thus the narrative cannot be completed as the designers originally intended.

In light of the player's agency, the game developer's has two important tasks: ensuring that players are motivated to move through the game in a particular way and providing players clues so they can interpret the game-world in ways that ensure this performance. The instruction manual and explanations of how to play games are crucial here—they provide an important blueprint for how a player should interpret the different semantic levels of the game. Without the game manual, for instance, a player might not recognize the importance of swamps, understand where monsters attack, or recognize the need for torches in the cave areas. Knowing how to read the landscape is critical; if players cannot understand how to navigate the rule systems of the game, the narrative components remain unachieved.

With the information for players to advance the story separated by locations and among different townspeople, the role of in-game space becomes an important vehicle for understanding narrative progression. Text becomes bound to specific locations, whether the castle of Tantegel or the town of Rimuldar, and directs players to new locations. Players find themselves keeping track of townspeople's statements, following their directives toward new locations, and then comparing the information in these new places to the information they already had gathered. As more regions of the game are explored, more information becomes available, until players can trace their information over multiple locations and through multiple in-game suggestions. However, the textual progression will certainly not prevent players from being sidetracked and going through the game in different orders. A

player can easily decide to head toward Cantlin before rescuing the princess, or find the silver harp before the Stones of Sunlight.

While text serves as an important point of reference for players to understand how their story progresses, the text within *Dragon Warrior* is, in fact, dispersed in such a way as to make geography of the game world central to narrative progression. In the next section, I explain the role of game geography and argue that linearity becomes established in *Dragon Warrior* through a careful management of game space. Narrative in this game becomes communicated through placement of text, and this placement often uses two types of barriers to prevent players from learning information too early. *Dragon Warrior* deploys a textual arrangement dispersed within the geography of the game world, but this dispersal is strategic, as some game information is placed beyond the initial reaches of game players. Unfolding narrative linearity is separated by non-textual modes of creating space, such as barriers and obstacles. *Dragon Warrior* uses two particular strategies for separating the information provided by villagers and their text boxes. These strategies appear as "barrier-driven" and "battle-driven," separations of game geography.

The Spatial Logics of Dragon Warrior's Narrative

From the very first moments of *Dragon Warrior*, players are tasked with effectively navigating the space within the game. King Lorick's throne room initially presents players with a quick study in several game mechanics, including how to talk to other characters through the talk command, opening treasure chests and doors, and using staircases. This initial presentation of the space of the throne room serves an important rhetorical function and an introduction to barrier driven narrative strategies. While these strategies form the basis for navigation in this world, a second set of narrative strategies hinges on the player's ability to navigate the spaces between the villages and towns within the game. These strategies touch upon a player's ability to recognize and gamble with the fighting ability of the

character. Both strategy sets result from a keen understanding of the game's mechanics and how these mechanics can be utilized to establish narrative linearity. I turn first to barrier-driven narrative strategies and explain several subsets of this strategy, including item-driven strategies and event driven strategies. I then turn to a second group of strategies that center around battles. These strategies, labeled after their relationship to fighting monsters, focus on how narrative geographies becomes managed through the deployment of enemy battles, whether they be the "soft" control of random monster battles, or the "hard" control of boss encounters. After discussing these methods as they appear in *Dragon Warrior*, I turn to the implications of these strategies on broader conversations about the ways in which video games' "weak narrative" becomes "strong narrative" through play.

Tantagel's throne room provides the initial player experience with the barriers involved in structuring narrative linearity in *Dragon Warrior*. The locked door is a central feature in establishing linearity in *Dragon Warrior* by the way it divides locations into accessible and inaccessible areas. Although the player-character begins play in Tantagel, the player quickly discovers that the magic key in the throne room disappears after a single use, and therefore cannot help them open the rest of the locked doors within the castle. When exploring the castle, players quickly come upon two additional locked doors. Since the players can see on the other side of these doors due to the game's overhead perspective, they notice this locked door prevents accessing a group of treasure chests. By showing players that the other side of the door potentially holds items they might want to use, the game provides a motivation for players to find more magic keys and therefore unlock these doors later in the game. However, the second door does not accompany the same motivational force. Rather, the second locked door in Tantagel prevents access to roughly half the castle. Players can "see" that this area of castle exists because of the overhead perspective they have of the town as a whole. Developers strategically avoided the use of "roofed" areas, allowing visibility to the areas behind these locked doors. Players

can see several additional soldiers on the other sides of these doors, and given the king's suggestion to communicate with all townsfolk and soldiers, the player potentially recognizes that the citizens on the other side of these doors might provide players with important information for how to progress through the game.

"Barrier-driven" strategies for telling stories depend on creating specific barriers of geographic access within the context of the game world. Locked doors in *Dragon Warrior* present a player with a set of objects that directly bar movement into multiple locations. These same doors also provide game designers with a way to utilize game space efficiently and still enable a sense of narrative progression. In the case of *Dragon Warrior*, these barrier-driven strategies serve to keep players "on course" in terms of narrative progression. Consider the way narrative becomes pieced together in the initial exploration of Tantegel castle. Players learn of attacked merchants, a missing princess, and about the neighboring town of Brecconary. The game provides narrative impetus for heading toward Brecconary by having townsfolk mention it as a place to buy weapons and armor, and villagers warn the player about upcoming battles in which these tools would be needed. Behind the locked doors of Tantegel lies another set of clues, from which the player constructs new goals. When returning to the castle players learn that it holds the Stones of Sunlight and that the grave of Garin in Garinham holds a silver harp. But at the beginning of the game, and before traveling to Brecconary, players have yet to hear about a silver harp, Garinham, or about the importance of the stones of sunlight. Without the doors serving as barriers, players would learn information outside a proper temporal context. The doors do not only prevent a player from accessing important in-game items, they similarly prevent players from breaking a designer-established linear timeline.

The effect of relying upon these locked doors to separate stages of information within *Dragon Warrior* is to create narrative events, whereupon the story within *Dragon Warrior* takes shape *over time*

and *through play* when players access the text provided by townsfolk. Players explore parts of towns like Tantegel, Brecconary, Garinham, Kol, Rimuldar, and Cantlin over the course of the game. But without the appropriate magic keys first bought in Rimuldar, players receive only the parts of narrative that direct them to explore the continent, look for new towns, and find a place to buy magic keys. As a player searches for information to find these keys, one uncovers several side quests that lead them to complete the narrative points of the game. Searching for a shop to buy keys in Kol, for instance, leads players to learn they are sold in Rimuldar on the southern continent, and similarly, that both fearsome monsters and a man with a magic flute can be found there. Traveling to Rimuldar to find this man leads players to a town with yet more locked doors, and deepens the motivation find the magic key shop. Yet when players eventually find the man with the magic flute, they also find out he left it in Kol, thereby requiring the player to return to Kol to find the object. Kol also has a door that needs unlocking, and on the other side of this door is useful information about the flute's purpose.

Mapping narrative progression demonstrates how game developers created division between sets of information available to players through locked doors and magic keys. *Dragon Warrior's* linear progression depends on this division of early-game and late-game information from villagers. Early information and basic geography of the game space is communicated through villagers that players can access without magic keys. A second set of villagers lives behind "locked doors," and can only be spoken to once magic keys have been purchased. When players carry these keys with them throughout the game world, they gain access to a second tier of information that helps them navigate the world toward more specific ends. Players in Tantagel learn of Garin's grave and the location of the important Silver Harp, which will help players get the Staff of Rain. Players similarly learn that combining the Staff of Rain and Stones of Sunlight will form a rainbow bridge to take them to Charlock castle. The two tiers of information frame how players participate in narrative. The primary rhetorical strategies for

partitioning information are the locked doors that delay when the player encounters that information until much later in the game.

The magic doors provide a relatively concrete and obvious example of barrier driven strategies. However, these strategies need not be literal spatial barriers such as doors. Items often serve the same rhetorical purpose of dividing the game into linear stages. Take, for example, the villager that asks for the silver harp. His request helps progress the narrative by giving a specific purpose to the player and taking his or her attention away from the larger goal of killing the Dragonlord. Finding the harp, however, remains difficult without any specific information about where it would be located. The information strewn about Tantagel and Garinham helps direct players to the location of the harp. Yet the harp quest also ties to the narrative progression related to information behind locked doors. Players must have magic keys in order to: (1) Gain information regarding the location of the harp, (2) Gain access to the entrance to the Grave of Garinham and, (3) Gain access to the area within the Grave of Garinham where the harp rests. To complete this part of the quest, the hero needs at least three magic keys. While returning players might recognize that only two of these keys are necessary for obtaining the harp, first-time players will stumble upon information about the harp's location only by accident and through exploring the areas behind locked doors.

Barrier driven strategies focus on *absolutely* preventing access to areas of the game where important specific information is held. These strategies prevent narrative progression by limiting the areas that players can access. Thus, barrier driven strategies for establishing narrative linearity provide game developers with strong control over how and when narrative elements are communicated to players. These strategies partition parts of the game so that players must complete an objective before gaining access to these places. Charlock Castle, which lies directly south of Tantegel and hosts the Dragonlord and his toughest minions, serves as the ultimate example of this phenomenon. Although

players know from the very beginning of the game where their primary goal lies, they are prevented from completing that goal until they overcome the series of barriers placed within the geography of Alefgard. The inland sea that blocks access to Charlock from Tantagel forces players to explore alternative ways to reach the island, which in turn leads players to discover the way Erdrick gained access to it. By gathering the components of the rainbow bridge, including the Staff of Rain and the Stones of Sunlight, the player can gain access to this area of the game and finally confront the villain that they originally set out to destroy. Because of the multiple barriers placed in front of them by game developers, players cannot immediately walk to the Dragonlord's castle. Rather, they must continuously find ways to gain access to new areas of the game by traveling, purchasing keys, and finally, finding sets of quest items.

This is not to say, however, that starting players would successfully navigate the dangers of Charlock castle if these barriers did not stop them. If players disregard the advice of townspeople that they encounter and rush headlong into battle, the monsters in and around Charlock castle would easily slay them. Thus, random monster battles act as a second element to establish linearity. "Random monster battles" are not completely random, as each region within *Dragon Warrior* has specific monsters that might appear during battles. Each region has a "monster ecology" from which the random battle generator selects enemies and challenges players. Like the textual component of the narrative, the battles that players participate in are geographically dispersed. Enemies in each area typically match each other in terms of difficulty, even if they appear vastly different visually. This diversity of enemies across multiple geographic regions does more than only preventing a player from becoming bored. The monster ecologies serve a narrative purpose. Should players explore in ways contrary to the pre-set paths established by the narrative, the difficulty of monster battles increases far beyond what that player should be able to defeat. By traveling the prescribed routes between villages

and game events, the players ensure a gradual, rather than abrupt, progression in the difficulty of enemies. In this way, monster battles that are "randomly" generated help establish a gradual progression and linearity in the overall game narrative.

Battle-oriented elements of narrative progression rely upon relationships between the player's narrative progression, the geography of the game space, and the likelihood that characters are strong enough to travel between plot points. Monster difficulty is combined with the overhead perspective that enables players to navigate the game world. Starting at level one, player-controlled characters barely survive battles with the slimes and red slimes that surround Tantagel castle. However, after several battles and leveling up, characters gain increases to their strength and speed score, making it easier to battle slimes and, eventually, harder enemies. As the player explores the game world, one faces stronger enemies, including ghosts and magicians. These enemies make short work of lower level characters, but if the player has spent sufficient time fighting weaker slimes and red slimes, and have equipment purchased from Brecconary, they can defeat these enemies too.

Several in game clues exist to alert players where stronger enemies appear. First are textual warnings from several villagers that tell players how monster strength relates to geography. In the open, accessible areas of Brecconary, a man explains that crossing a bridge means encountering stronger enemies. In Kol, another man explains that enemies are stronger on the southern continent where Rimuldar is located. These statements by villagers provide players with information about how enemy strength relates to geographical location. Even early in the game, these geographic references provide very important information for players. Should players try to travel to Garinham without leveling up by battling slimes outside Tantagel and Brecconary, they quickly find themselves dispatched by ghosts and other enemies en route to the northern town. The geographical markings for stronger monsters are some hills to the south of Tantegel where some magicians fight the player and the desert surrounding

Erdrick's cave. Should players travel further, they find additional sets of bridges: between Tantagel and Kol, Garinham and Hauksness, and Hauksness and Cantlin. Players also find a significant difference between the monsters around Kol and the monsters around Rimuldar, even though the areas are separated by a tunnel rather than a bridge.

The dispersion of monsters on the continents and around the towns provides players with "soft," or limited, access to these areas. The player has several options for navigating battles. If the player's character is strong enough to defeat these monsters, the player can engage the monster and defeat it. Alternatively, the player can successfully avoid these battles by selecting the "flee" command during battle, although "fleeing" runs the risk that the monster might block the escape route and get an extra attack on the player. Additionally, the player might not encounter battles out of sheer luck. The random battle mechanic does not guarantee that players will encounter enemies with any type of discernible pattern, though hills, swamps, and forests will more likely generate a battle than open fields. Characters at level one, should they be lucky enough to avoid a monster battle, could potentially make it to Cantlin. However, this likelihood is so very small that it is functionally impossible. Players would encounter very difficult battles even for higher-level characters, and in some cases, including Cantlin's Golem guardian, players could not damage the enemy at all.

In a few instances, this "soft" boundary of monster battles does, in fact, turn into a "hard boundary" similar to the way locked doors function. Certain spaces in Alefgard guarantee a battle with specific enemies, and typically, these enemies are boss enemies. However, although each of these enemies is technically optional (in that the game can be completed without fighting them), it is very unlikely that players would successfully defeat the Dragonlord if they choose to avoid these lesser monsters. Three enemies act as geographic barriers: the Axe Knight that guards Erdrick's armor in the town of Hauksness, the Dragon that guards Princess Gwealin, and the Golem in front of Cantlin. In

each of these cases, players enter a small "spiked" space that will guarantee an encounter with this enemy. When the player defeats the Golem or the Dragon in these spaces, the player can then enter these spaces in the future and not fight these creatures again. However, in the case of the Axe Knight, the space remains "spiked" indefinitely, so when players defeat him, they must make sure to search the space for Erdrick's armor, lest they have to face him again when they step on the space once more.

These enemies differ from typical enemies because of how they are tied to game geography.[30] Unlike random monster battles, battles with these enemies are guaranteed by the programming. Once a player has the character enter the appropriate area where the monster is located, the monster will appear and attack the player. These "boss" enemies function as barriers that prevent further exploration until their deaths. Even if one selects "flee" when encountering the Golem, Dragon, or Axe Knight, the player does not stay on the same space that the battle began. Instead, the player is moved to a different space so they cannot bypass the battle. These enemies must be defeated in order to progress the narrative. Without these critical battles, the game cannot be fully explored, and important information will be withheld from players. For these cases, the monster battles become mandatory for players to continue the narrative arc, either because they guard important items or information that the player needs to move to the next part of the plot.

Without battling the Dragon and rescuing Gwealin, the player will not receive the compass that helps locate evidence of descent from Erdrick. Without this evidence, the player cannot complete the Rainbow Drop to create a bridge to Charlock. Another quest chain links Kol to Cantlin, where should players decide not to visit the village, they never learn of the flute that puts the Golem to sleep. Failure to defeat the Golem means a player cannot gain the information necessary to find Erdrick's armor. Without Erdrick's armor, the player will have a difficult time besting both the enemies in Charlock and

[30] The "Dragon" boss that guards Gwaelin is also encountered as a general monster later in the game. While these monsters are statistically the same enemy in terms of strength and abilities, there is a critical difference between the encounters. Later "Dragon" monsters are randomly generated battles, while the dragon that guards Gwaelin is fixed.

the Dragonlord himself. Finally, Cantlin holds valuable information on the location of Erdrick's Token, which the player needs in order to convince the old man south of Rimuldar that he descends from Erdrick and is therefore worthy of making the Rainbow Drop.

There are many potential ways players can disrupt or defer completing *Dragon Warrior*'s narrative. A player may have trouble fighting early enemies, never level up, and never make it past the early plains around Tantagel and Brecconary. Or, a player might have no problems navigating battles with enemies, but similarly never talk to the "correct" villagers in order to find out the next set of objects required to progress the narrative. In spite of these potential results of player action, game designers anticipated at least some player competency. *Dragon Warrior* maintains its challenge as a game because its narrative structure allows players to explore, make mistakes, and try again, even if they do not have complete mental pictures of what they will encounter. Even if players do make these mistakes, *Dragon Warrior* still has the linear characteristic of a narrative. Players have the potential to uncover information, which exists because of how designers distributed narrative across the geography of a fictional kingdom. In the final section of this chapter, I argue that these strategies underscore differences between functional goals that operate extra-textually and formal goals that operate to make a text coherent.

Narrative and the Three Enthymemes

Storytelling is an old communication form and the introduction of computer technologies meant that producers could attempt to merge two different communication forms (games and stories) into the same artifact. As I have argued, the primary rhetorical hurdle confronting these media producers is managing the ability of players to act within the game world to maintain narrative coherence. I also discussed the role of player action in video games, and how the video game as a story depends on the creative ways game designers distribute the semantic elements that constitute the narrative's plot.

However, I have presented the narrative in *Dragon Warrior* as it was accomplished through hours of play. The sequence of events described in this chapter represents one particular play through, with the experience of multiple battles left out of the narrative summary. This final section grapples with the transformation of text, digital images, and player performance into a cohesive narrative.

The ontological status of a specific video game, whether it is critiqued in terms of narrative or simulation, corresponds to the formal structure and shape of narrative. With this in mind, the assumption of form that a theorist takes to the video game will, nonetheless, dictate whether they interpret a game as narrative or not. To Frasca and Aarseth, narrative is limited. As Frasca declares, "Narrative authors…only have one shot in their gun—a fixed sequence of events."[31] Aarseth argues that if choices in games are insignificant if narrative is emphasized too much, "the story disguises itself as a game, using the game technology to tell itself."[32] Under these logics, it would seem that *Dragon Warrior* is just a narrative dressed in the clothing of a game, and therefore reflects narrative form utilizing a new technology.

Such treatment of narrative does not reveal the ways that technology creates narrative, or how computer designers seek to replicate the form of narrative in a new technological context. For the purposes of this chapter the definition of narrative remains important insofar as it tells rhetorical critics what basic structure or form discourse must take in order to be considered "narrative." In light of this goal, media theorist Marie-Laure Ryan's summary of narrative is instructive: "a narrative text is one that brings a world to the mind (setting) and populates it with intelligent agents (characters). These agents participate in actions and happenings (events, plot), which cause global changes in the narrative world."[33] She continues, "Narrative is thus a mental representation of casually connected states and

[31] Frasca, "Simulation versus Narrative," 227.
[32] Epsen Aarseth, "Quest Games as Post-Narrative Discourse," in *Narrative Across Media: The Languages of Storytelling*, ed. Marie-Laure Ryan, 361-76. (Lincoln, NE: University of Nebraska Press, 2004), 366.
[33] Marie-Laure Ryan, "Will New Media Produce New Narratives" in *Narrative Across Media*, ed. Marie-Laure Ryan

events that captures a segment in the history of a world and of its members."[34] Ryan, like Aarseth, visits the interactive story *Afternoon*, but concludes that the author could just as easily produce contradictory events (such as a recently dead character speaking in the next chapter) in print media. She concludes that while computers, specifically hypertext, can produce stories, not all will result in a story. She explains: "it is simply not possible to construct a coherent story out of every permutation of a set of textual fragments, because fragments are implicitly ordered by relations of presupposition, material causality, psychological motivation, and temporal sequence."[35]

Ryan's turn to "fragments" underlies an important supporting assumption that may indicate how "narrative" and "game" can coexist within the same artifact. "Fragments" call to mind Michael Calvin McGee's treatment of texts as comprised of many referents that must, in turn, be reconstructed by willing audiences.[36] For McGee, "The only way to 'say it all' in our fractured culture is to provide readers/audiences with dense, truncated fragments which cue them to produce a finished discourse in their minds. In short, text construction is now something done more by the consumers than by the producers of discourse."[37] Aarseth, in his distinction between quests and narrative, raises the issue of completeness in analyzing a game, arguing "Although we certainly also 'analyze' (if that is the correct word) quests while doing them, the in medias res analysis is restricted by the lack of complete knowledge, so we need to distinguish between strategic and reflective analysis. Researchers usually analyze games *after* playing them."[38] In this conception, the critic waits until after playing through the game before crafting their arguments and analyzing the artifact. However, Aarseth distinguishes the moments of analysis from moments of problem solving that occur in game play. In this sense, Aarseth

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(Lincoln, NE: University of Nebraska Press, 2004), 337.
[34] Ibid.
[35] Ibid., 341.
[36] Michael Calvin McGee, "Text, Context, and the Fragmentation of American Culture," *Western Journal of Communication,* 54 n. 3 (1990): 274-289. Accessed June 25, 2015 from EBSCO*host*.
[37] Ibid., 288.
[38] Aarseth, "Quest Games as Post-Narrative Discourse," 369.

would point out that my summary of *Dragon Warrior* would be written after the fact.

"Reading" *Dragon Warrior*, however, requires game playing. In engaging *Dragon Warrior* critically, I noted the knowledge available to a player. In writing the section summarizing the narrative, I highlighted moments where new information was revealed, and what that information suggested to players in terms of narrative development and directions to explore. To sufficiently provide enough detail on how the narrative progresses, I attended to the state of the narrative as it developed within the framework of the game rules as they unfold. I interpret Aarseth's meta-criticism as calling scholars to look at strategic analysis that unfolds in players as the game progresses. Aarseth asks critics, then, to think about what players do as they play a game. Aarseth wants critics to make sense of player actions, the game's responses to those actions, and what players take away from the experience.

I would challenge Aarseth's thinking, however, because it focuses too much on what the player does or could do. Instead, I find it more useful to interpret the strategies employed by designers that direct players to act in certain ways within the game environment. In writing the above section summarizing the discourse encountered within *Dragon Warrior*, I described the gradual narrative unfolding so that readers would understand what possibilities they might encounter should they have played the game. Such a summary requires careful balancing between the knowledge garnered during the playing process and how the reader of the criticism comes to interpret that text as described. My telling of *Dragon Warrior* is not universal. Other players would and do experience it differently. Charting the unfolding of narrative in this way does not seek universalism, but rather, an approximation of typical narrative progression, what most players would *likely* encounter as they transverse the game world.

Refocusing on the work of game designers, rather than focusing theorizing on the audience's action, realigns video game criticism with traditional narrative criticism in rhetorical studies. This

realignment allows the critic to respond to rhetorical concepts endemic to persuading an audience, such as Walter Fisher's narrative fidelity and probability.[39] But this attention on design also allows the critic to recognize narrative when the player's actions correspond to reasonability, and when the player is proceeding in a logical manner based on the knowledge provided from the game world as it was created by designers and producers. Narrative fidelity in this sense makes sure that the player has legitimate reasons to behave in certain ways, and that "in-game" events would lead to comprehendible results. Designers of *Dragon Warrior* institute these good reasons through showing both warning players of inherent risks of tougher monsters and indicating what players will need to advance, such as magic keys, visiting central locations such as Rimuldar or the tomb in Garinham, or other plot-required items. At the same time, this critical approach of cataloging play also provides an understanding of narrative probability, thereby showing the critic where contradictions or holes in the narrative fabric exist not on the part of the player, but in the constructive pieces used by the designer.[40] In *Dragon Warrior*, game designers set up geographic boundaries to direct players in their exploration, and ensure important plot points, such as rescuing the princess, are encountered through linking those events with items necessary to advance in the game. The narrative becomes probable when the game mechanics and representations line up in a way that players can make sense of in ways that will help them form adequate, in-game responses.

The rhetorical perspective on narrative, however, similarly has weaknesses when applied to *Dragon Warrior* and any other artifact wherein experimentation with communication forms is a key characteristic. As Fisher describes, the narrative paradigm of criticism seeks to understand a text in terms of the stories it tells. Fisher explains, "technical discourse is imbued with myth and metaphor, and aesthetic discourse has cognitive capacity and import. The narrative paradigm is designed, in part,

[39] Walter R. Fisher, "The Narrative Paradigm: An Elaboration," in *Methods of Rhetorical Criticism, 3rd edition*, eds. Bernard L. Brock et al. (Detroit, MI: Wayne State University Press, 1990), 234-254.
[40] Ibid.

to draw attention to these facts and provide a way of thinking that fully takes them into account."[41] Narrative approaches to criticism evaluate a text in terms of how its story functions persuasively as to their actions outside the gaming context. Jasinski notes that looking at rhetorical functions of narrative typically fall within aesthetic, instrumental, or constitutive approaches.[42] This tradition of looking "outside" for the functions of an artifact's rhetoric is endemic for many narrative traditions in rhetorical studies, particularly those that emphasize "narrative" itself as a specific rhetorical strategy employed for utilitarian ends—whether those ends be constitutive or instrumental.[43] However, when critics consider rhetorical strategies in terms of their formal purposes, as my analysis of *Dragon Warrior* demonstrates, the artifact becomes thought of as an experiment in form, where designers are attempting something to remediate an older form of communication into a new technological mix.

To tell a story in a video game requires anticipating and directing the player to take particular courses of action. Video games can construct narrative, but only through the sophisticated use of enthymemes. Enthymeme itself is a widely used rhetorical term, and has a history tracing back at least to Aristotle.[44] As Thomas Conley argues, theorists drawing on Aristotle's understanding of enthymeme identify it as a general argumentative strategy wherein a syllogism is presented to the audience with a single presupposition left unstated.[45] This general understanding of enthymemes as occurring when critical pieces of argument remain unstated so that the audience must "complete" the understanding

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[41] Ibid., 235.

[42] James Jasinski, "Narrative," in *Sourcebook on Rhetoric: Key concepts in Contemporary Rhetorical Studies* (Thousand Oaks, CA: Sage Publications, 2001), 389.

[43] The two starkest examples of this have similar theoretical underpinnings. The first example, Kenneth Burke's "The Rhetoric of Hitler's Battle" frames narrative analysis as a route to understanding the complex mind of Adolf Hitler. Narrative analysis in this piece flows from Burke's interpretations of Hitler's autobiography as an attempt to direct the German people toward genocidal ends. The second example, Maurice Charland's work on the *Quebecois,* takes up Burke's notion of constitutive rhetoric and applies it to a Canadian context. In Charland's work, narrative functions as a way of provoking an audience to accept an identity and act according to that identity's prescriptions. See Kenneth Burke, "The Rhetoric of Hitler's 'Battle,'" in *The Philosophy of Literary Form, California edition* (Berkeley, California: University of California Press, 1973); Maurice Charland, "Constitutive Rhetoric: The Case of the Peuple Québécois," *The Quarterly Journal of Speech*, 73 n. 2 (1987), 133-150.

[44] See James Jasinski, "Enthymeme," in *Sourcebook on Rhetoric: Key concepts in Contemporary Rhetorical Studies*, 205-209. Thousand Oaks, CA: Sage Publications, 2001.

[45] Thomas M. Conley, "The Enthymeme in Perspective," *Quarterly Journal of Speech*, 70 n. 2 (1984), 168-170.

nicely points to how designers create narrative in the video game medium.[46]

There are two treatments of this concept that highlight the sophisticated ways video games utilize the formal structure of enthymemes to create narrative cohesion. Ian Bogost argues that video games work through a *procedural* enthymeme. He writes, "the interactivity afforded by the game's coupling of player manipulations and gameplay effects is much narrower than the expressive space the game and the player subsequently create. The player performs a great deal of mental synthesis, filling the gap between subjectivity and game processes."[47] The player brings a set of behaviors within the parameters of game rules, which Bogost refers to as a procedural enthymeme.[48]

Bogost offers a perspective on how video games require adherence to a set of rules by the player: The player chooses from a set of game behaviors to "fill in" the steps called for by the computer program. By coupling player behaviors with game rules, Bogost's procedural enthymeme addresses the *syntactic* elements of narrative. Provided the player participates in the syntactic elements of the game by interpreting those rules correctly, then the game can proceed and narrative may result. In *Dragon Warrior*, the procedural enthymeme corresponds to the player recognizing that doors require keys that keys disappear, and that keys must be purchased from a shop. When the player acts in concordance with these procedural enthymemes, the game narrative effectively "moves forward." However, when a player acts contrary to rules (i.e., trying to open a wall with a key, or trying to walk across the sea to the Dragon Lord's castle), the narrative effectively "stops." When looking at a procedural enthymeme, players supply a set of external instructions through their controller or keyboard, and thus those signals are relayed to the processor and the graphics engine shows these actions on the screen. When a player

[46] I qualify the use of enthymemes in this way because, as Conley points out, modern uses of "enthymeme" are often simplistic. What is important about enthymeme for my own work is how parts of an argument or statement remain implicitly suggested to the audience. It is these areas of "implicitness" that, I think, offer useful interpretations of video game play and the rhetorical acts completed by game designers.

[47] Ian Bogost, *Persuasive Games* (Cambridge, MA: The MIT Press, 2007), 43.

[48] Unfortunately, Bogost does not quite clarify the significance of this term, or revisit it in his theorizing.

inputs a specific set of instructions, they effectively "complete" the enthymeme. Procedural enthymemes correspond to the syntactic elements of narrative and correspond to how player behavior registers in the realm of the game's digital coding.

While Bogost speaks to the syntactic elements of video games and narrative, the work of Cara Finnegan can help address the semantic elements of video game narrative.[49] Finnegan examines a controversy where a political party challenged the visual basis of photographic arguments. In her investigation, Finnegan reveals a subtle assumption on behalf of an audience that treats seeing photographs as "truth." Finnegan calls this the "naturalistic enthymeme," writing "When the audience for documentary photography assumes the naturalism of the photograph, it is tapping into an argumentative resource."[50] While Finnegan points out that this enthymeme typically reflects technologies and their ability to "capture" moments or events, the relationship she points out is primarily a semantic one. The naturalistic enthymeme, as an argument, works because of the interpretation of the image as reflecting reality. The primary strength of the argument posed by the image, therefore, rests on whether the audience interprets the image as "real."

In the context of video games, however, the enthymeme operates a bit differently. There are three dimensions of realism involved in photographic technologies: representational realism, ontological realism, and mechanical realism. Finnegan describes these three realisms as: "a representation of something in the world (representational realism), actually occurring before the camera at a particular time and place (ontological realism), captured by the camera with no intervention from the photographer (mechanical realism)."[51] Finnegan rightfully points out that photography works both indexically and iconically. A photograph both looks like its subject matter and correlates to

[49] Cara A. Finnegan, "The Naturalistic Enthymeme and Visual Argument: Photographic Representation in the 'Skull Controversy,'" *Argumentation and Advocacy*, 37 n. 3 (2001) 133-149. Accessed June 25, 2015 from EBSCO*host*.
[50] Ibid., 143
[51] Ibid.

something in the world through temporal and spatial relationships.

While photography directly invokes the world through the capturing of light onto film, the logic of video game visuals works differently. Instead of invoking reality, video game visuals in *Dragon Quest* break from representing "real" places. Video game images, at least for the 1980s NES system, do not utilize or integrate photographic technologies to represent geographic spaces.[52] One is not expected to treat the world of Alefgard as an *actual* time and place. Instead of a "naturalistic enthymeme," video games provide what I would call an "existential enthymeme." Video games work as long as the players assume there is some kind of virtual "world" in which they can act. The player need not believe this world is real, or actual, or material, but they do need to recognize that certain shapes, colors, and sounds correspond to or are meant to represent different real objects. The player needs to supply certain interpretations of meaning in order to navigate the game world. *Dragon Warrior* requires players to interpret certain locations as "caves," certain patterned blocks as impassible "water," and certain graphical representations as visual depictions of the "self." A game can break from realistic expectations too, by incorporating visions of landscapes and characters alien to human existence. Even in these situations, however, there remain semantic vestiges and iconic logics.

There exists a third way that video games utilize a form of enthymeme, and it is this kind of enthymeme that becomes most problematic for Aarseth. Aarseth's primary criticism of narrative theory is that it cannot account for arbitrary behaviors of the audience. When the reader of *Afternoon* responds to the computer by typing nonsense commands, Aarseth sees the result as a breakdown of narrative form. Thus, for a video game to enact narrative there is a *pragmatic* enthymeme at work alongside the semantic and syntactic ones. Video games require players to supplement a set of goals to their behaviors in the virtual world. While some goals are clearly given by the game itself, such as defeating

[52] Historical context is important here. Later video games, such as Sierra On-line's *Phantasmagoria*, would incorporate the filming of live actors into game-play. Thus, players would "control" images that corresponded to actual events. This blending of real-digital imagery, though, was technologically beyond the NES.

the Dragonlord in *Dragon Warrior*, other goals are formed as players interact with the game world. For instance, players might explore Alefgard too eagerly at first, and find themselves either lost or fighting monsters that are too difficult for their character level. After dying a few times and being warped to Tantagel castle, a player might alter their behaviors to reflect a new goal of self-preservation or caution. Alternatively, the player might decide to forgo exploration, and instead focus on the goal of saving gold to upgrade their armor, increasing the chances they will survive against stronger enemies. Whichever route the player takes, they supplement their own sets of goals within the game's objectives. As long as these objectives correspond with the broader overarching story, the player will continue to drive their performance in a way that completes the game's narrative.

Invoking enthymeme in these different contexts highlights that designers contend with multiple modes of player agency within a video game. It is not enough to look at how game players input different commands into a game system and therefore potentially disrupt the temporal syntax of a narrative. The *procedural enthymeme* is only one unit operating within the context of game play. Players also make decisions based upon their interpretations of what the game world looks like and the goals they establish when they play. As this analysis shows, game designers can anticipate and direct players to input commands so that narrative will unfold in a particular fashion. But these decisions need to take into account forms of agency beyond simply entering commands. The designer must also contend with player's active interpretation of the game world and the potential motivations players come to have as playing. Effective game designers often direct player interpretations of imagery or utilize rules and images to align player motivations along linear paths. As a rhetorical term, "enthymeme" can highlight how managing audience agency often shapes how stories become told. One might ask the audience to stay seated when telling a story face to face, thereby withholding narrative progression until the audience supplies the action of sitting quietly. One might also tell a story about a

poor peasant that helps the knight who fed him without explicitly stating that the peasant was starving. With video games, the player acts within the story, so establishing the player's motives becomes central to the act of storytelling. Establishing sets of goals becomes a required step in ensuring game players act in ways that help the game artifact "tell" the story.

Conclusion: Exploring a Linear Story

The narrative strategies employed by *Dragon Warrior's* creators propel the player along a set path, and players perform the narrative like actors do in a play. While individual players have the agency to "act" in ways contrary to their script, their presence on a stage provides compelling reasons to perform a certain way. The audience, other actors, and the economic rewards associated with following instructions of the director provide important incentives for the actor. With video games, the ability for the audience to "act" within the play is not only possible—it is required. When players lose their place in the narrative, or perform in ways contrary to the overarching arc of the play, the story stutters to a halt. Narrative progression in video games relies on the player acting in particular ways.

Narrative in video games, therefore, requires collaboration between authorial intent and audience participation. The game developer provides rule systems, images, and a broader set of conditions for players to strive toward. Players, on the other hand, gather meaning from the game world, act according to understood (or misunderstood) rules, and work toward specific game goals. These are pragmatic, syntactic, and semantic roles; when the player supplies the right "supposition" or "assumption," in the form of behavior, the game narrative continues. When the player has ulterior motives, acts contrary to game rules, or interprets images contrary to their iconic resemblance, the game narrative dissolves into a set of nonsensical player behavior. *Dragon Warrior's* designers create game spaces that encourage specific pathways of player action, and hints as to what these behaviors are abound in the form of "advice" from in-game villagers. Ultimately, player action transforms a set of

computer instructions and visual accompaniment into a narrative event sequence, but only if they align their goals with what the game producer expects, interpret the game landscape and text as corresponding to particular meanings, and perform sets of actions that correspond to particular arrangements of game code.

The final calculus of a video game narrative reflects an alignment of three dimensions of narrative linearity. The first dimension corresponds to players acting according to syntactic rules, a grammar of action and consequence created by the game designer. This procedural enthymeme requires players making decisions and entering executable commands into a computer. The player must also mentally arrange the game world by associating images and sounds with corresponding units of meaning. This existential enthymeme speaks to the ability of the player to interpret the sonic and visual components of the game world in ways that correspond to their purposes in the broader narrative "reality." Finally, game developers and audiences create narrative when goals align, and game developers can provide logical reasons for players to behave in particular, narratively relevant ways.

In this chapter, I focused on the player's role in establishing the narrative of video games. The previous chapters are deeply attentive to the specific contexts for *Dragon Quest* and *Dragon Warrior*. But what, then, does this game tell us about the practice of rhetoric in general? In the next and final chapter, I unify the information gleaned from the analysis of *Dragon Quest* and *Dragon Warrior* in the first three chapters. Here, I deal with the implications of dealing with video games as space and text, narrative and rule system, commodity and artifact. In light of the elements of genre, historical economic context, and narrative progression of the current and previous chapters, chapter four begins asking what this all means for the study of rhetoric in the 21st century.

CONCLUSION

The Materials of New Media and Implications for Rhetorical Studies

This dissertation has looked at the video games *Dragon Quest* and *Dragon Warrior* in terms of genre, circulation, and narrative. In the first chapter of this dissertation, I described how the technology of the Nintendo Entertainment System created a rhetorical necessity for game developers to hire artistic talent in the form of musicians and graphic designers. Because of these constraints, the JRPG genre developed in ways that incorporated manga aesthetics and commercial music. In the second chapter, I followed *Dragon Warrior's* paths of circulation into North America. By looking at the patterns of circulation, I considered how the game was able to circulate widely among an audience despite its poor sales, providing Nintendo with an advertising gimmick. In the third chapter, I described the subtle rhetorical strategies employed by game designers use to establish narrative linearity. Narrative form in video games, I argued, depends on a careful fulfillment of three types of enthymemes: the pragmatic, the procedural, and the existential.

Each of these chapters offer different accounts of how physical constraints—technologies, techniques, and markets—factor into the rhetoric of video games, and in each of these chapters we see particular arrangements of what may be broadly termed "materiality." In this conclusion, I argue that video games and other digital technologies offer rhetorical critics new perspectives on the relationships among contingency and genre, circulation, and narrative. By tracing the role of genre, circulation, and narrative in the history of a particular video game, this dissertation has accounted for multiple rhetorical possibilities. Genre, circulation, and the remediation of narrative into new digital forms each invoke an element of choice. Developers deal with technologies, techniques, and markets in different ways throughout the life cycle of a video game, and rhetorical critics can learn much about the rhetoric of video games by accounting for the role of materiality in each of these stages. I offer the concept of

materialist contingency as a means of describing the rhetorical lives of video games. Wrestling with the both the "accidental" and "decisive" role of materiality in shaping a rhetorical process can provide fruitful perspectives on rhetorical invention, dissemination, and engagement in digital contexts.

Contingency is a means by which rhetorical theorists have grappled with rhetorical choices. However, choice is never all encompassing, and often material circumstances have a significant role in allowing for and preventing agency among both creators and audiences of rhetoric. "Materiality," or the physicality of objects, has long frustrated rhetorical critics and communication theorists, leading to numerous debates over how it relates to the rhetorical situation. Rhetorical studies, I will argue, often projects the material as diametrically opposed to the symbolic. Before engaging the concept of "materialist contingency," then, I will account for this tradition in rhetorical studies and highlight some of the problems with dividing symbol from material. In the second part of this conclusion, I suggest an alternative understanding of materiality, one that figures the material as a set of building blocks with which a rhetor crafts messages. My goal is to more closely align the material with rhetorical constraints and contingent elements of communication.

Materialist contingency challenges the critic to focus on how "materials" shape rhetorical practices in the stages of invention, the moments an audience interacts with the artifact or text, and how this artifact circulates among multiple audiences. But materialist contingency also highlights a central tension with rhetorical analysis in the age of digital media. The final portion of this chapter explains this tension, highlighting the emergence of code as a central component to rhetorical practices. Digital technologies differ in their material construction, yet still allow for uniformity in the arrangement of symbols across platforms and devices. The genre and circulation histories of *Dragon Quest* and *Dragon Warrior* highlight important material assumptions of universalism that operate within rhetorical criticism. For many forms of media, this assumption is valid. However, assumptions of universalism

across iterations of a text require additional scrutinizing when technologies directly enable audience participation the way video games do. Attention to materialist contingency of video games highlights how computer technologies afford mass-produced variability of artifacts, and in this formation, the "universal" element of code becomes hidden by the visual and sonic properties that video games emphasize. The contemporary rhetorical landscape features mass-produced variability, a variability that takes its cue from the unique characteristics of electricity and circuits.

Contingency and Genre, Circulation, and Narrative

"Contingency" has been a key word in recent work in both rhetorical studies and science and technology studies (STS). However, rhetorical and STS scholars tend to use contingency differently, and this difference offers a productive place to begin considering this term. As the introduction to this dissertation suggests, contingency in STS centers on the accidental and circumstantial in the act of inventing or creating knowledge. In rhetorical studies, contingency tends to focus on a temporal moment, often the time when a speaker and/or audience must make a decision or carry out a plan of action. Both senses of contingency provide fruitful insights into various social phenomena, from the creation of scientific papers to understanding the options laid out in a presidential speech.

Contingency, from one perspective, is the reason rhetoric is necessary. Thomas Farrell argues, "Rhetoric is about something that has always troubled philosophy and ethics….It has been with us all along. It is called *contingency*."[1] However, Farrell offers a warning in conceptualizing contingency: it can neither be treated wholly in material terms, nor can it adequately be addressed as a product of discourse alone. Farrell writes, "If contingency is placed squarely and solely in the world of events, as things that may be about to happen, then the substance of rhetoric must always be receding from the

[1] Thomas B. Farrell, *Norms of Rhetorical Culture* (New Haven, CT: Yale University Press, 1993), 76.

imminent uncertainty of chance and fortune toward the eventual facticity of historical truth."[2] If a rhetorician places too much emphasis on the material elements of a situation, Farrell surmises, then the results of discourse become simply an accounting of these material events and how they occurred. Rhetoric, in this configuration, becomes short-lived and ephemeral, without any form of lasting importance. Farrell states, "Rhetorical practice would then be no more durable than the latest weather forecast."[3] Attributing all contingency to be a result of discourse, however, results in an equally untenable position. Farrell warns that treating contingency "as an attribute of propositions alone" turns rhetoric into "nothing more than a subset of logic and, in all likelihood, a flawed logic at best."[4]

Michael Pfau, following Farrell, grounds rhetorical scholarship on contingency in Aristotle. Like Farrell, Pfau makes contingency a central part of rhetorical action. Whereas Farrell sees contingency as creating the need for rhetoric, Pfau links contingency to fear appeals. Treating fear appeals as an instrument to prod a civic body into deliberation or debate, Pfau writes: "under certain conditions some fear appeals—"civic fear" appeals—potentially contribute to effective public deliberation about challenges facing the community of citizens."[5] Once again, the central role of contingency is how possible outcomes are both indicated, deliberated upon, and potential futures enacted. Robert Danisch relates contingency to the social changes wrought by scientific endeavors and technical knowledge, underscoring a key relationship between contingency and imperfect knowledge. Danisch explains, "The more important characteristic of the connection between risk and uncertainty, however, is that the very growth of scientific/expert knowledge that seeks to improve the human condition is the central causal factor for the explosion of risks and deepening of uncertainty."[6] Science

[2] Ibid., 77.
[3] Ibid.
[4] Ibid.
[5] Michael William Pfau, "Who's Afraid of Fear Appeals? Contingency, Courage, and Deliberation in Rhetorical Theory and Practice," Philosophy and Rhetoric, 40 n. 2 (2007), 227. Accessed June 10, 2015, doi: 10.1353/par.2007.0024.
[6] Robert Danisch, "Political Rhetoric in a World Risk Society," *Rhetoric Society Quarterly*, 40 n. 2 (2010), 179. Accessed

and technology have radically changed the relationship of society to the planet, thereby enabling new technologically induced disasters such as global warming and nuclear war.

By delving into the management of risk, and tying contingency more closely to the role of science and technology, Danisch brings an important insight into the importance of contingency to rhetorical practice. The difference between contingent events and contingent propositions that Danisch argues for illustrates a need for more careful terminologies associated with contingency. Ultimately, Danisch's call for recognizing events and propositions repeats the dichotomy that Farrell first identifies between material and discourse. Contingent events, which Danisch defines as "unintended consequences," are the material consequences of decision making. Contingent propositions, on the other hand, concern the truth value of a discourse.[7] Perhaps because Danisch, like Farrell and Pfau, starts from an Aristotelian understanding of contingency, this dichotomous framing of "material" and "discourse" sneaks into the conversation uninvited.

The above summary of contingency in rhetorical studies replicates a troubling dichotomy between "discourse" and "materiality." As a result, rhetorical studies tends to approach contingency more from the "discourse" side of the equation, treating contingency as central to the role of decision making and deliberative processes. This is productive, for instance, when a rhetorician focuses on explicitly political oratory, and many important issues require an analysis of the contingent elements of communication as such. However, a broader conception of contingency is required when a rhetorician wishes to examine the roles of technology in shaping and understanding rhetorical processes. An analysis of video games, in particular, demands confronting the messy interrelationships among technology, designers, audiences, programmers, artists, and numerous other social actors. By moving toward the more "material" side of the term "contingency," we can articulate new "types" of

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June 25, 2015, doi: 10.1080/02773941003614456.

[7] Ibid., 175.

contingency beyond possible discourses and events. Doing so, however, requires revisiting the problem that the material poses in rhetorical theory.

Materiality as a Rhetorical Problem

Rhetorical critics have long struggled with how to make sense of rhetorical practices in light of a myriad of social, economic, biological, and physical elements that influence, control, and direct human existence. Theorists that study technology often are characterized as falling within two separate theoretical camps: either "technological determinism," where technology is the key determining factor for how people live, or "social determinism," where human society shapes how technology is used, distributed, and advanced.[8] As media theorist J. MacGregor Wise argues, these two approaches reflect a separation of humans from technology, where each is understood as distinct from one another. As a result of this separation, the concepts of "technology" and "the social" then become mapped into a cause-effect relationship, where one, thereby, "causes" the other.[9] In addition to the problem of the false dichotomy between humans and technology, communication researchers have struggled to adequately address the issue of materiality, or the "stuff" of the physical world that shape and enable our different modes of communication.

Rhetorical theorists have often approached materiality through the lens of understanding how symbols refer to the material world. One particular attempt to address the "material" problem emerges in the work of Kenneth Burke.[10] Burke poses a dialectical relationship between "action," the symbolic workings of human beings, and "motion," the material elements that exist outside or independent of the symbolic. Many scholars have taken up this terminology in their own works, thereby highlighting its

[8] J. Macgregor Wise, *Exploring Technology and Social Space*, (Thousand Oaks, California: Sage Publications, 1997).
[9] Ibid., 5.
[10] Kenneth Burke, "The Rhetorical Situation," in *Communication: Ethical and Moral Issues*, ed. Lee Thayer, (London, England: Gordon and Breach, 1973), 263-275.

analytical usefulness.[11] As Richard A. Engnell argues, "The persistent concern with the status of the material in Burke suggests that what is at stake is not merely an interest in Burke but a renewed concern for material... Is rhetoric a part of material reality? Or is it 'merely' symbolic?[12]

In rhetorical studies, the material is often treated through a lens of ideological criticism. As Dana Cloud argues, "materialist" as a critical term emerges from Karl Marx's economic analysis. Cloud explains that the term has been used in two senses.[13] The first sense of "materialist" connects to the ways human beings build their world and simultaneously derive their subjectivity from those activities. The second sense of materialism emphasizes modes of production. Cloud explains, "The second and broader definition of materialism consists in the idea that the mode of production, or the way in which goods are made and distributed in society, determines the social relations and forms of consciousness of any given epoch."[14] In the Marxist sense, materialism points to the modes of production that form a society that form both the ways individuals interact socially as well as the shape and contents of their subjective experiences.

At stake in the discussions over the role of materiality and rhetorical criticism is how rhetorical theorists should treat the possibility of action (much like the central tension in interpreting video games is the ability to interpret a game in light of the player's action). As Cloud and Joshua Gunn explain,

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[11] Burke's distinction between action and motion has led many scholars to wrestle with the "action-motion" dialectic as both a concept of embodiment and a way of understanding rhetorical processes. While a review of these articles is beyond the scope of my argument, their work deserves mention. See, for instance, Daniel J. O'Keefe, "Burke's Dramatism and Action Theory," *Rhetoric Society Quarterly,* 8 n. 1 (1978), 8-15. Accessed June 25, 2015 from EBSCO*host*; Charles Conrad and Elizabeth A. Macom, "Re-visiting Kenneth Burke: Dramatism/logology and the Problem of Agency" *Southern Communication Journal*, 61 n. 1 (1995), 11-28. Accessed June 25, 2015 from EBSCO*host*; Richard A. Engnell, "Materiality, Symbolicity, and the Rhetoric of Order: 'Dialectical Biologism' as Motive in Burke," *Western Journal of Communication,* 62 n. 1 (1998), 1-25. Accessed June 25, 2015 from EBSCO*host*; Bryan Crable, "Symbolizing Motion: Burke's Dialectic and Rhetoric of the Body" *Rhetoric Review,* 22 n. 2 (2003), 121-137. Accessed June 25, 2015, doi: 10.1207/S15327981RR22022; Debra Hawhee, "Language as Sensuous Action: Sir Richard Paget, Kenneth Burke, and Gesture-Speech Theory," *Quarterly Journal of Speech*, 92 n. 4 (2006), 331-354. Accessed June 25, 2015, doi: 10.1080/00335630601080393; Diane Davis, "Identification: Burke and Freud on Who You Are," *Rhetoric Society Quarterly*, 38 n. 2 (2008), 123-147. Accessed June 25, 2015, doi:10.1080/02773940701779785.

[12] Engnell, "Materiality, Symbolicity, and the Rhetoric of Order," 2.

[13] Dana L. Cloud, "The Materiality of Discourse as Oxymoron: A Challenge to Critical Rhetoric" *Western Journal of Communication*, 58 n. 3 (1994), 141-163. Accessed June 25, 2015 from EBSCO*host*.

[14] Ibid., 144.

ignoring the material elements of social life risks a form of magical thinking.[15] Gunn and Cloud invoke "contingency" as way of avoiding this magical thinking. They write that human agency involves both thought and being grounded in material conditions, and thus, echoing Burke, a dialectical perspective is necessary. Gunn and Cloud explain, "a dialectical way of thinking about agency sees an individual only in relation to other individuals, social relations, and histories. Consequently, the individual will cannot exist independent of interactivity, dialogue, and collectivity."[16] The "contingent" ability of people to act, therefore, is tied to their relationships to others. Gunn and Cloud conclude that this dialectical understanding of agency "resonates even with traditional rhetorical theory's understanding of agency as occurring in a simultaneously enabling and constraining situation."[17]

Gunn and Cloud end their essay with a return to rhetorical theories that engage the concept of constraint. As a concept in rhetorical studies, constraint emerges in Lloyd Bitzer's work on the rhetorical situation.[18] Here, there is a similar discussion of symbols and "material" reality that is present in Burke's analysis. However, Bitzer's interpretation of this relationship works differently than Burke's, as Bitzer emphasizes the importance of rhetoric as a form of *intervention* in reality. Bitzer writes, "In short, rhetoric is a mode of altering reality, not by the direct application of energy to objects, but by the creation of discourse which changes reality through the mediation of thought and action."[19] Thus, while Burke emphasizes the role of symbols in understanding reality, Bitzer emphasizes the role of communication in changing reality. Bitzer goes further, arguing that each rhetorical situation is comprised of three constituent elements: exigency, audience, and constraints.[20]

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[15] Joshua Gunn and Dana L. Cloud, "Agentic Orientation as Magical Voluntarism," *Communication Theory*, 20 n. 1 (2010), 50-78. Accessed June 25, 2015, doi:10.1111/j.1468-2885.2009.01349.x.
[16] Ibid., 72.
[17] Ibid.
[18] Lloyd Bitzer, "The Rhetorical Situation," *Philosophy and Rhetoric*, 1 n. 1 (1968), 1-14. Accessed June 25, 2015 from EBSCO*host.*
[19] Ibid., 4.
[20] Bitzer's rhetorical situation has been critiqued, of course. See Richard E. Vatz, "The Myth of the Rhetorical Situation," *Philosophy & Rhetoric*, 6 n. 3 (1973), 154-161. Accessed June 25, 2015 from EBSCOhost; Kathleen M. Hall Jamieson,

I find Bitzer's definition of constraints to be particularly helpful in understanding the role of materiality. Bitzer explains that "every rhetorical situation contains a set of *constraints* made up of persons, events, objects, and relations which are parts of the situation because they have the power to constrain decision and action needed to modify the exigence."[21] The constraints of a situation include objects, relationships, symbols and materials that a rhetor might employ to create discourse. Taking Bitzer's constraints alongside Gunn and Cloud dialectical agency emphasizes that the material is grounded in moments throughout the rhetorical act. Materiality corresponds both to how and what a rhetor can communicate. These material constraints appear throughout the rhetorical process. Before an utterance, these material constraints are present in the form of the building materials that the rhetor will use to craft his or her message. During the utterance, these material constraints shape the reception of the message by the audience. Finally, after the utterance has concluded, material constraints create the routes in which the message travels and how fast the message travels.

Turning back to Bruno Latour's work in actor-network theory can provide a useful way of reframing constraints so that notions of contingency can avoid becoming deadlocked within the "symbol" or "material" dichotomy. Latour argues in multiple essays that technology allows for a material construction to "stand in" for human actors, enabling a kind of substitution for the work that humans might do.[22] In Latour's early work, he examines the social creation of facts in ethnographic examination of scientific work.[23] In discussing the process of observing scientists and their productive

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"Generic Constraints and the Rhetorical Situation," *Philosophy & Rhetoric*, 6 n. 3 (1973), 162-170. Accessed June 25, 2015 from EBSCOhost; Scott Consigny, "Rhetoric and Its Situations," *Philosophy & Rhetoric*, 7 n. 3 (1974), 175-186. Accessed June 25, 2015 from EBSCO*host*. For an overview of these perspectives using visual forms, see Donna Gorrell, "The Rhetorical Situation Again: Linked Components in a Venn Diagram," *Philosophy & Rhetoric*, 30 n. 4 (1997), 395-412. Accessed June 25, 2015 from EBSCO*host.*

[21] Ibid. 8.

[22] See Bruno Latour, as Jim Johnson, "Mixing Humans and Nonhumans Together: The Sociology of a Door-Closer," *Social Problems*, 35 n. 3 (1988): 298-310. Accessed June 10, 2015, doi: 10.2307/800624; Bruno Latour, "Technology is Society Made Durable" *The Sociological Review,* 38 n. S1 (1990), 103-31. Accessed July 3, 2015, doi: 10.1111/j.1467-954X.1990.tb03350.x.

[23] Bruno Latour and Steve Woolgar, *Laboratory Life: The Construction of Scientific Facts*, (Princeton, NJ: Princeton

processes, Latour explains the central guiding research question that frames his project. He writes:

> It is no surprise to our observer to learn that scientists read published material. What surprises him more is that a vast amount of literature emanates from within the laboratory. How is it that the costly apparatus, animals, chemicals, and activities of the bench space combine to produce a written document, and why are these documents so highly valued by participants?[24]

Latour's project underscores how even orderly reports of the scientific process hide the processes of production upon which these reports rely, much in the way modern media projects, including video games, hide the processes that make such communication possible. Movie sets and video game design studios need not be treated differently from one another, as these media products are similarly produced through webs of interrelated human and technical actors.

Rhetorical studies can conceptualize contingency in a third way more amenable to its material elements by framing research questions differently. Instead of thinking in terms of "events" and "propositions," a reduction of contingency to its material elements provides a productive space to highlight which materials matter in the construction of a particular moment of rhetoric. By taking Latour's observations and the research of actor-network theory seriously, rhetorical scholars can extend their analysis into the moments where message creators delegate their own communicative abilities to the actions of a machine. But these machines and their hardware are created to fulfill multiple potential actions, both imagined at the moment of the design and potentially unmasked through experimentation much later. As technologists Finn Brunton and Gabriella Coleman remark, "Hardware, the underlying material stuff, turns out to be full of politics and negotiations rather than crisp ontological certainty."[25] Looking closer at the material and technological need not reduce human agency to a set of mechanistic

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University Press, 1979).

[24] Ibid., 48.

[25] Finn Brunton and Gabriella Coleman, "Closer to the Metal," in Media Technologies: Essays on Communication, Materiality, and Society," eds. Tarleton Gillespie, et al., (Cambridge, MA: The MIT Press, 2014), 95.

causes and effects.

I understand materialist contingency, in its simplest terms, to reference the role of choice in selecting the materials with which one would communicate. This expanding of contingency expands the objects of rhetorical inquiry to those objects and materials that might otherwise be taken for granted. I am not asserting that all rhetorical activities necessitate an emphasis on contingent material components. But these materials are foundational to understanding how the creator of the message understood the act of communicating where technology is a central component to how the message is created, circulated, and expressed. As the scope of the dissertation attends to *Dragon Quest* and *Dragon Warrior* as a video game, I turn to explaining how the ways a video game expands our understanding of the contingencies involved in genre, circulation, and narrative.

Genre and the Contingency of Material Assemblages

Genre theorists, in particular, appreciate the role of the rhetorical situation in the formation of new texts. Genre theory, it turns out, offers a way into this discussion of materiality at the point of invention. For Carolyn Miller, rhetors encounter genre at the moment they recognize the situation in which they speak, write, or create.[26] Miller grounds her theory of genre within a broader discussion of rhetoric and the deterministic elements of the rhetorical situation: "Because human action is based on and guided by meaning, not by material causes, at the center of action is a process of interpretation. Before we can act, we must interpret the indeterminate material environment; we define, or 'determine' a situation."[27] The rhetorical situation, and genre's relationship to it, revolves around the human ability to see situations as analogous to one another. Miller takes this understanding of genre as situationally related and concludes that approaching contemporary discourse through Aristotelian types is potentially

[26] Carolyn R. Miller, "Genre as Social Action," *Quarterly Journal of Speech*, 70 n. 2 (1984), 151-167. Accessed June 10, 2015, through ERIC.
[27] Ibid., 156.

problematic, as "these genres do not describe complete situation-types that recur today."[28] Miller's point about the role of interpretation would highlight the contingency inherent in how people interpret their situation. She rightfully recognizes that our communication situations, constrained as they are by technology, have become much more complicated than the speech and writing-bound situations encountered by the ancient Greeks.

Marika Lüders, Lin Prøitz, and Terje Rasmussen extend Miller's understanding of genres and their pragmatic function by tying them more explicitly to technologies and social institutions.[29] These authors treat genres as operating between both individual artifacts (or 'texts' as they define them) and the medium of communication. But in their position between media and message, genres serve an important purpose in guiding communicative practice: "On a macro level, we argue functionally that the 'task' of genres is to overcome contingency and facilitate communication. The function is to enhance both composing and understanding of communication by offering interpretative, recognizable and flexible frames of reference for communication, such as the novel, the letter from the tax authorities or mobile-cam/mms greeting."[30] Focusing again on functionality, these authors articulate a middle ground between media and message: a place where potential structures of communication exist and can be called upon by communicators. Similarly, their framework for understanding genre remains compatible with an emphasis on materiality, as these authors allow for casual relationships from medium to genre and a bidirectional causal relationship between genre and text.[31] Contingency here references the ability of individuals to not only choose to interpret their situation in a particular way,

[28] Ibid., 164.
[29] Marika Lüders, Lin Prøitz and Terje Rasmussen, "Emerging Personal Media Genres" *New Media Society,* 12 n. 6 (2010), 947-963. Accessed June 10, 2015, doi: 10.1177/1461444809352203.
[30] Ibid., 949.
[31] Ibid., 955. The diagram provided in this article is particularly illustrative, because it provides a visual explanation of how media, genres, and texts might relate to one another. I agree with Lüders et al.'s overarching claim that both texts and medium can affect genre, and that genre can also affect text. I would also argue that a medium can be technologically altered to address what people see as a need to improve generic conventions. However, that argument is beyond the scope of this chapter and dissertation.

but also to choose which technology will bear the responsibility of circulating their message. These authors are unpacking why it might seem inappropriate for some media to relay particular genres of communication (for example, breaking up with someone through text message, or greeting a stranger through an arrangement of flowers that spell out "hello").

Genre helps refocus rhetorical understandings of contingency toward addressing some issues of rhetorical invention, a term emphasized by rhetorical scholars that emphasize the composition of texts rather than the interpretation of texts. This tradition, extending from the theoretical work of Karen Burke LeFevre, understands rhetorical invention as an inherently social act.[32] LeFevre challenged how theorists understood the practice of composing text, which she labels as invention, as a solitary behavior. Instead, she advocates for a "social" view of invention, one that acknowledges that "Rhetorical invention thus cannot be viewed as a totally private act of an individual. It presupposes the existence of others and is oriented to take into account their knowledge, attitudes, and values."[33] This tradition of composition studies challenges writing teachers to incorporate realistic constraints and freedoms into the college writing classroom in ways that emphasize the social dimensions of the creative process.[34] Not surprisingly, in shifting composition classrooms toward modern writing, composition studies have begun examining writing in a post-Internet light. This recent interest in invention suggests that rhetorical scholars attend to the process of writing across multiple modes of production.[35]

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[32] Karen Burke LeFevre, *Invention as a Social Act* (Carbondale, Illinois: Southern Illinois University Press, 1987).
[33] Ibid., 46.
[34] For a recent summary of this tradition, see Peter Simonson, "Reinventing Invention, Again," *Rhetoric Society Quarterly,* 44 n. 4 (2014), 299-322. Accessed June 25, 2015, doi:10.1080/02773945.2014.938862.
[35] Several scholars reflect this approach to multi-modality. A few examples include: Jody Shipka, "Sound Engineering: Toward a Theory of Multimodal Soundness," *Computers and Composition,* 23 (2006), 355-373. Accessed June 25, 2015, doi:10.1016/j.compcom.2006.05.003; Jenny Edbauer Rice, "Rhetoric's Mechanics: Retooling the Equipment of Writing Production," *College Composition and Communication,* 60 n. 2 (2008), 366-387. Accessed June 25, 2015 from http://www.ncte.org/cccc/ccc/issues/v60-2; Leigh A. Jones, "Podcasting and Performativity: Multimodal Invention in an Advanced Writing Class," *Composition Studies,* 38 n. 2 (2010), 75-91. Accessed June 25, 2015 from http://www.compositionstudies.uwinnipeg.ca/archives/382.html; Adam Koehler, "Digitizing Craft: Creative Writing

Attending to *Dragon Quest* through the lens of genre helps identify important contingent elements of generic change. The genre of role-playing games have particular characteristics that need to be translated through various media. The table-top version of these games is designed in such a way as to relegate the outcome of uncertainty to the rolling of dice. When this genre of games is brought to computers, dice-rolling (itself a relationship between individuals and an artifact) becomes substituted for lines of code that, similarly, randomly produce numbers or events. In creating a game for a computer, designers of *Wizardry* and *Ultima* made programming choices as to how random events would appear, and how the computer would calculate these events. Designers of *Dragon Quest* similarly made decisions as to how random chance would relate to game play, and the use of code to create "random monster encounters" would feature prominently in role-playing games as a result.

Actor network theory also sheds new light on the role of the "social" in genre. Rather than treat the social as a master category, I move to treat the social as a set of assemblages, following Latour's description in *Reassembling the Social*.[36] Latour's broader argument is that the term "social" covers such a wide spectrum of activities, objects, and beings that the term loses some of its critical capacities. He writes, "the social, as usually defined, is but a moment in the long history of assemblages, suspended between the search for the body politic and the exploration of the collective."[37] To treat genre as "social action" more generally misses out on the numerous configurations of objects, materials, and relationships that constitute genre. Genre is not asocial; a genre still involves multiple interactions between multiple authors, technologies, and texts. Rather, it is that social, as a descriptive

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Studies and New Media—A Proposal," *College English*, 75 n. 4 (2013), 379-397. Accessed June 25, 2015 from http://www.ncte.org/journals/ce/issues/v75-4; Elizabeth C. Tomlinson, "The Role of Invention in Digital Dating Site Profile Composition," *Computers and Composition*, 30 (2013), 115-128. Accessed June 25, 2015, doi:10.1016/j.compcom.2013.04.003; Marc C. Santos and Mark H. Leahy, "Postpedagogy and Web Writing" *Computers and Composition*, 32 (2014), 84-95. Accessed June 25, 2015, doi:10.1016/j.compcom.2014.04.006.

[36] Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory*, (Oxford, England: Oxford University Press, 2005).

[37] Ibid., 247.

term, loses its critical edge. In response to ambiguity over the word "social," Latour reframes it:

> The adjective 'social' designates two entirely different phenomena: it's at once a substance, a kind of stuff, and also a movement between non-social elements. In both cases, the social vanishes. When it is taken as a solid, it loses its ability to associate; when it's taken as a fluid, the social again disappears because it flashes only briefly, just at the fleeting moment when new associations are sticking the collective together.[38]

Genre as "social," following this logic, is an assemblage of multiple moving parts. The technological context rhetors work within, their knowledge of previous artifacts and texts, and their relational motives all come together to form an individual text. As my analysis of *Dragon Quest* shows, as the material situation changed, new game designers took up the mechanics and themes of RPGs. While they acted in a new technological situation, this technological change also necessitated relating in different ways to new people. Thinking of genre as an assemblage of technologies, economic practices, and relationships among different people, becomes common sense if we accept Miller's observation of genre emerging from individuals recognizing a commonality among multiple situations. A set of similar situations can mean two situations with similar building materials with which to make a text, or similar types of relationships among rhetors and the audience, or similar symbolic resources for the rhetor to deploy. Terms such as "economics," "relationships," and "technologies" are simply dimensions of the social, and these dimensions correct the more vague qualities of the larger, umbrella term "social."

As a tool for historical analysis, genre provides a useful way for engaging this moment of invention and the role of material contingency within it. Material contingency helps remind rhetorical critics that there are multiple dimensions of sociality, and that these dimensions each correspond to a way of relating between objects and humans. Economics, for instance, frames relationships between

[38] Ibid., 159.

people and objects as primarily about exchange and assigning value. Designers engage their game design through the collection and utilization of particular generic conventions and ways of arranging an experience for a user. If genre gets at the early moments of contingency in a rhetorical act, including the ways a designer can pull from multiple genres of communication in the creation of a new game, then circulation shifts attention toward those moments after an artifact has been "released" by the designers. Yet designers do not just choose which symbols to employ—as materialist contingency reminds us—they also choose which media will carry their messages and how that media will accomplish this. In the case of JRPGs, the comparison between *Final Fantasy* and *Dragon Warrior* at the end of chapter one illustrates how happenstance relationships between Yuji Horii and famous manga artist Akira Toriyama became a mode of relating that led to economic gain. The pressure *Dragon Warrior* created for other designers in Japan was an additional contingency with which companies must grapple. Employing the same rhetorical strategies of networking with manga artists would yield Enix's rival game company, Square Soft, its own success. Here we see invention and material elements of contingency at work. Certain aspects of game design, such as how many colors one had access to or how sound could be arranged, would remain static as long as the technology remained the same. But *Final Fantasy* could incorporate different kinds of color arrangement and musical scores, thereby distinguishing itself from *Dragon Quest* while, at the same time, miming its successful deployment of relationships and game mechanics.

Circulation and the Contingency of Movement

Circulation, as a concept, does not address materiality head on, but rather, it assumes a technological mode of artifact reproduction. To better address the materiality of circulation, and similarly, Olson's "recirculation,"[39] it might help to make more explicit the modes of circulation that

[39] Lester C. Olson, "Pictorial Representations of British America Resisting Rape: Rhetorical Re-Circulation of a Print Series

media systems allow for and encourage. Even in our own cultural moment, years removed from the 1980s magazine and television culture, circulation occurs at accelerated speeds. Through the powers of social networking websites, themselves owned by rich and powerful companies, the materiality of our communication infrastructure allows for unmitigated technological copying, circulating, and consuming of information. The constitutive technologies available for 1980s video game designers, particularly Enix in their translation of *Dragon Quest* into *Dragon Warrior* meant a slow recirculation of the game for the new audience. Given the three years of translating, this speed, as chapter two argued, contributed to its inability to sell in the American marketplace.

But to bring materialist contingency to circulation requires more than just economic and industry analysis. It requires recognizing that there is a political economy to what is reproduced. Rather, circulation's materiality both depends on the cost of reproduction, the availability of those technologies of reproduction, and the profitability of recirculation. Circulation exists because we know that the things we create and communicate have the capacity to move beyond the initial spatial bounds and social contexts in which they were first performed. However, if genre helps rhetorical scholars understand the "before" picture of human communication because of its links to the historical production of texts, then circulation helps us understand the "after" of human communication in terms of the repurposing of textual, visual, and sonic elements.

Circulation follows closely in tandem with the concept of remediation. Remediation, as Jay David Bolter and Richard Grusin understand it, consists of an oscillation between two logics of representation.[40] On one hand, designers and developers often attempt to hide the occurrence of mediation, thereby making it transparent for the audience. An example of this is the way a producer of a television show seeks to recreate or replicate historical moments or places by adjusting costuming or

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Portraying the Boston Port Bill of 1774" *Rhetoric & Public Affairs*, 12 n. 1 (2009), 1-36.

[40] Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media*, (Cambridge, MA: The MIT Press, 2000).

filming on location. In the opposing logic, producers might call attention to the fact something is mediated, perhaps by visually indicating a place of interaction (such as a mouse pointer on a computer) or providing other "breaks" of perspective. For Bolter and Grusin, remediation highlights not just a point of movement of meaning from one situation to another, but also recognition that particular media require an altering of symbols in order to replicate a message. A message meant to sell a video game, for instance, remediates the game's visuals or sounds according to the media that hosts the advertisement. A magazine can utilize the visuals of a game, while a television broadcast enables showing both images and the reproduction of sounds.

Remediation and circulation each speak to different sides of the question of determinism. Circulation, it seems, emphasizes the social actors responsible for recreating or reusing rhetorical artifacts. Lester Olson, for instance, treats the movement and changing of a particular set of images during the years before the U. S. war for independence from Britain. He argues that "each re-circulation of the composition as an image maker's or publisher's active response to one or another of the earlier versions. By this means, partisans exercised a circumscribed degree of rhetorical agency in that they attempted to reshape a composition's contingent meanings for different audiences."[41] Sean Patrick O'Rourke's work on the circulation and noncirculation of photographs and text in the American civil rights movement underlies this focus on agency—journalists and editors in pro-segregationist newspapers decided what images would appear in newspapers and which images would not in ways that corresponded to their political goals.[42] Megan Foley's theorizing on the relationship between the U.S. presidency and the historical emergence of sound bites leads her to state, "Appropriation of textual fragments is important, however, because recirculation demonstrates an exercise of rhetorical agency

[41] Olson, "Pictural Representations of British America Resisting Rape," 3.
[42] Sean Patrick O'Rourke, "Circulation and Noncirculation of Photographic Texts in the Civil Rights Movement: A Case Study of the Rhetoric of Control," *Rhetoric & Public Affairs*, 15 n. 4 (2012), 685-694. Accessed June 11, 2015 from Communication & Mass Media Complete, EBSCOhost.

over an original text by recipients of that text and, for that reason, represents a distinct historical marker for how presidential speech moves through culture."[43] In each of these cases, the way circulation calls attention to methods and strategies employed by rhetors in their re-use of already existing messages focuses attention on social actors, while remediation emphasizes the way technology transforms messages as they move into new and different media scenarios. Circulation and remediation emphasize human or technological action, respectively.

I am not arguing that emphasizing the human agency involved in circulating messages is deficient. These authors each make valuable contributions to understanding how and why a message changes as it travels its path through multiple social spheres. Theorists emphasizing circulation want to understand how a message changes as audiences utilize it for new purposes beyond its initial creation. Circulation effectively summarizes the moments of rhetorical agency on the behalf of rhetors. However, addressing this same set of questions through the perspective of remediation recognizes that technology itself affords certain novel forms of recirculation. For *Dragon Quest*, remediation into a new technological context meant designers could incorporate new visual elements into the game framework and eliminate some of the difficulty of saving game progress. With this remediation also came a new set of social constraints that accompanied the technological. *Dragon Warrior* required a technological deletion of particular phrases (such as pafu-pafu), that while still technologically possible, did not fall within Nintendo's range of acceptable game content. Nintendo's ownership of the 10NES chip meant a material barrier for Enix. The company could not circulate *Dragon Warrior* without working within both the technical confines of the 10NES chip *and* the relational confines of Nintendo's censorship. Becoming attuned to the material contingencies, in the form of technology and the relational obligations it necessitated, provides a much deeper understanding of why *Dragon Quest*

[43] Megan Foley, "The Presidency as Pastiche: Atomization, Circulation, and Rhetorical Instability," *Rhetoric & Public Affairs*, 15 n. 4 (2012), 627. Accessed June 25, 2015 from EBSCO*host*.

underwent the transformations it did to become *Dragon Warrior*.

As chapter two argued, the channels of circulation for a video game in the 1980s faced numerous challenges, but also numerous opportunities. Chapter two discussed four different channels for circulation present in North America—advertising, business contracts, technology, and translation. Each of these channels meant the artifact of *Dragon Warrior* would travel at different speeds and through different networks of humans and technology. Business relationships between Enix and Nintendo meant *Dragon Warrior* could circulate in the United States since it had been so profitable in Japan. Advertising for the game would start years before the game's translation was completed. The act of translating a text-heavy game from Japanese into English meant considerable time and energy would be spent localizing it for a North American audience and remediating it so that it corresponded to the technical standards of the NES. Yet, the strange combination of all these channels meant the game could circulate even after failing to sell. The state of business contracts, advertising strategies, translation processes, and technological apparatuses both enabled and limited how *Dragon Quest* was remediated as *Dragon Warrior* and then circulated within the United States.

Narrative and the Contingency of Activity

Addressing material contingency in the realm of narrative requires returning to Epsen Aarseth's arguments against narrative as summarized in the previous chapter.[44] Aarseth argues that narrative approaches to digital media, such as video games, neglect their "ergodic" dimension. In essence, "ergodic" texts depend on the indeterminacy of audience action—the "ergodic" nature of the technology means that producers need to account for this action.[45] Ultimately, Aarseth addresses the importance of *contingent* elements that video game producers and software designers build into their programs. Aarseth succinctly explains his objection to "narrative" by stating:

[44] Epsen Aarseth, *Cybertext*, (Baltimore, MD: John Hopkins University Press, 1997)
[45] Ibid.

> Even if we adopt the widest (and weakest) possible notion of narratives—that they could be architectural rather than sequential, enacted rather than related, experienced personally and uniquely rather than observed collectively and statically—an ontological difference would still remain. This difference is probably best described with the word *choice*.[46]

Aarseth features choice as a central difference that distinguishes computer programs and video games from media like novels and he claims that a different nomenclature is required for addressing the elements traditionally associated with narrative as they appear in video games. He offers "quests" as a reasonable alternative to narrative, because "the player-avatar must move through a landscape in order to fulfill a goal while mastering a series of challenges. This phenomenon is called a quest…. This, not storytelling, is their dominant structure."[47] Aarseth extends his point metaphorically, explaining that many games lead players through a play structure that is similar to a string of pearls—moments of freedom to explore are connected by a "string" where player agency is significantly constrained. What this metaphor highlights is a central element of game design, the limiting and extending what players can do in different game-play moments. Aarseth's argument highlights the role of player (but not the avatar) in navigating a game, and this player can be unpredictable or mischievous, finding new ways to explore game spaces and act contrary to the designer's expectations. This brings into question how game designers move players along this potential string, as designers need to somehow clue players to where they best go next or what actions will lead to successful navigation of the game. It is useful to think of these moments of direction as rhetorical responses to player freedom, and thus, rhetorical responses to the *contingency* of player action.

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[46] Epsen Aarseth, "Quest Games as Post-Narrative Discourse" in *Narrative Across Media*, ed. Marie-Laure Ryan (Lincoln, NE: University of Nebraska Press, 2004), 366. I have repeated Aarseth's use of italics for the term "choice" to respect his emphasis.

[47] Ibid., 368.

The previous chapter answered this question of "how" by showing the ways game designers control access to game spaces through the management of different barriers. Game space management allowed designers to direct the ebb and flow of player action. Through the management of game space, and cues directing players to move the through the game in a particular order, the designers of *Dragon Warrior,* as well as other games, are able to "propositionally" direct players to act in particular ways and therefore create a plot. In this configuration, contingency emphasizes the rhetorical functions of a video game's programming and design. Rules and representations become the rhetorical tools used by technicians as storytellers.

The main argument in the third chapter configured the new technology of video games and computing as a rhetorical hurdle that developers needed to overcome in order to maintain a semblance of linear narrative progression. Designers had to develop strategies for ensuring that a video game could have a beginning, middle, and end. Computer technologies, it seemed, placed game designers in an awkward position of utilizing new technologies to invoke older forms of communication. Arguments by critics like Epsen Aarseth and Gonzales Frasca implied that the technologies used in video games meant stories would be out of order, or that narrative was too limited a perspective to take in order to understand the complexities of video games.[48] In some ways, their arguments hinged on the idea that a narrative needs to be the same for each reading, that different players in different locations must have the same chronological order so that "narrative" can occur, or that players must make the same decisions each time they play. The possibility of different order, and different potential events, meant that video games broke from the narrative tradition in important ways.

As chapter three argued, communicating a narrative within a video game required the development of new strategies to ensure events would unfold in a particular way. The technology,

[48] Epsen Aarseth, *Cybertext*, (Baltimore, MD: John Hopkins University Press, 1997); Gonazlo Frasca, "Simulation versus Narrative: Introduction to Ludology" In *The Video Game Theory Reader,* eds Mark J. P. Wolf and Bernard Perron, 221-235 (New York: Routledge, 2003).

when understood as a set of computer instructions, required designers to lead players along particular narrative paths. The chapter concluded by revisiting the concept of enthymeme, and for a strong narrative to emerge from a video game, designers must incorporate at least three separate types of enthymemes. These enthymemes--the procedural, the existential, and the pragmatic—each correspond to the semiotic elements of narrative. A designer must effectively use code to ensure the player contributes to the game progressing through deploying rule systems and making the actions that players can take clear. That same designer must also ensure a visual and sonic environment that makes sense to the player, and that the visuals and sounds used work with the player to create a meaningful world within the game. Finally, that designer must ensure that sets of goals required by the game are aligned with the goals that players bring to the game. With the presence of so many enthymemes, it might seem that video games are inherently unstable because of the actions that players might take.

Yet rhetorical theorists have long challenged the stability of texts. Michael Calvin McGee's treatment of the text as fragmentary exemplifies this tradition, and he explains that "texts are understood to be larger than the apparently finished discourse that presents itself as transparent. The apparently finished discourse is in fact a dense reconstruction of all the bits of other discourses from which it was made."[49] In McGee's understanding, rhetorical criticism begins at acknowledging the broader picture of how a discourse is made from the pieces of previous communicative events. McGee argues that this fragmentation of culture leads, in turn, to a rhetorical situation where audiences construct versions of a text. He states, "In short, *text construction is now something done more by the consumers than by the producers of discourse*."[50] Video games and computer technologies are, in many ways, the logical endpoint of McGee's observation, where the technological systems and economies have placed more ability in the typical consumer of a message to co-create what that message entails.

[49] Michael Calvin McGee, "Text, Context, and the Fragmentation of American Culture," *Western Journal of Communication*, 54 n. 3 (1990), 279. Accessed June 25, 2015 from EBSCO*host*.
[50] Ibid., 288.

Desktop computers, cell phone applications, recording software, and numerous other digital technologies have placed media creation in the hands of consumers.[51] Users of these technologies rearrange fragments of meaning into new configurations with simple movements on a touchscreen, or by typing in search terms in a search engine. Digital technologies, because of their inherent need for audiences to "complete" them, require constant attention from an audience. The resulting relationship between computer technologies and their various incarnations has, according to *The Seattle Times*, resulted in a form of "digital dementia."[52]

Framing technology as addictive or sanity-threatening, however, is not my goal. Rather, instead of thinking of digital technologies as somehow damaging, it might be more useful to think of the affordance of digital technology as feeling "unfinished." The multiple enthymemes of a video game, for instance, require completion. The more anxious human beings might find these enthymemes stressful; we need to fill in those gaps with our own actions, meanings, and goals. The relationship between the technological and the human is what is important here. The material of communication itself, because of computers, touch screens, and the like, affords the capability of users to literally create and finish the message. The technology itself is not addictive, but rather, the agency afforded to humans through the technology is.

The affordances of technology color our capacity to circulate, and recirculate, the messages we and others create. Affordances constrain the creative action of media producers, allowing certain ways of reaching the audience and precluding others. One need only consider how fast the process of

[51] The widespread availability of these kinds has led to what Henry Jenkins describes as "participatory culture." Jenkins writes, "The term 'participatory culture' contrasts with older notions of passive media spectatorship. Rather than talking about media producers and consumers as occupying separate roles, we might now see them as participants who interact with each other according to a new set of rules that none of us fully understands. Not all participants are created equal. Corporations—and even individuals within corporate media—still exert greater power than any individual consumer or even the aggregate of consumers. And some consumers have greater abilities to participate in this emerging culture than others." See Henry Jenkins, *Convergence Culture*, (New York, New York: New York University Press, 2006), 3.

[52] "'Digital Dementia, for Our Screen-Addicted Kids" *The Seattle Times*, March 16, 2014, Accessed April 26, 2015 from http://www.seattletimes.com/seattle-news/health/lsquodigital-dementiarsquo-for-our-screen-addicted-kids/.

circulation has become to recognize the multiple technologies of circulation. Spoken words circulate ideas beyond the confines of individual human thought. Writing in a phonetic alphabet enabled the visualization of sound, and thereby afforded humanity with enduring communication that could address individuals one has not met. The printing press allowed for the standardization of written language, thereby affording audiences an ease of reading.[53] This process has only sped up with the capacity of computers to quickly replicate and circulate our communication processes, while sometimes automating them altogether. Given the speed with which computer technologies in turn spur new, more impressive computing, these speeds will, without a doubt, increase exponentially.[54] Technological affordances similarly rearrange genre and how it develops as well. But a medium's affordances also coordinate the structures of narrative available to it.

What video games do (because of the material computing technologies that enable them) is upset the ideal we have for texts and artifacts. With computer technologies, the ability to manipulate the outcome of a narrative as an audience member becomes a possibility. But computers are not the only technologies with this affordance. Spoken language and theater, for instance, allow for multiple ways to present stories. Western society has a long history of producing different versions of Shakespeare's *Romeo and Juliet*.[55] While we often acknowledge that this play can be performed in numerous different ways, with different scenes removed or edited for the sake of whichever audience it

[53] These observations stem from much of the research done by media ecologists. While early theorists like Marshall McLuhan and Walter Ong did not use the terminology of affordances, they do take interest in how media reshapes social practices. See, for instance, Eric Havelock, *The Muse Learns to Write,* (New Haven, CT: Yale University Press, 1986); Marshall McLuhan, *Understanding Media, MIT Press edition,* (Cambridge, Massachusetts: The MIT Press, 1994); Walter J. Ong, *Orality and Literacy*, (London, England: Routledge 2002).

[54] The speed of computing has been predicted to double between every year and every other year, as explained by Moore's Law. See Erik Brynjolfsson and Andrew McAfee, *The Second Machine Age*, (New York: W. W. Norton and Company, 2014).

[55] See, for instance, Jennifer L. Martin, "Tights vs. Tattoos: Filmic Interpretations of 'Romeo and Juliet,'" *The English Journal*, 92 n. 1 (2002), 41-46. Accessed June 25, 2015, doi:10.2307/821945; Geoffrey Way, "Social Shakespeare: Romeo and Juliet, Social Media, and Performance," *Journal of Narrative Theory*, 41 n. 3 (2011), 401-420. Accessed June 25, 2015, doi: 10.1353/jnt.2011.0096. It should also be noted that this is not solely a Western phenomenon, see Yilin Chen, "Staging Sexuality in an All-Male Adaptation of *Romeo and Juliet*" *Studies in Theatre and Performance*, 34 n. 1 (2014), 27-37. Accessed June 25, 2015, doi: 10.1080/14682761.2013.875386.

will be performed for, or which actors will do the performing, we still treat them, socially, as the same story regardless of the permutations. Improvisation, too, allows for creative troupes of actors to take inputs from the audience and turn them into cohesive narratives, sometimes in the middle of a scene.

With the advent of digital technologies, mutability arises in how text might appear, what words will be read, and even the arrangement of multiple lines of text at the moment of reading. Because multiple players are likely to make different decisions, and because the game itself uses a system of randomized encounters, the artifact seems more particular than universal. Each play through of the game is unique in the sense that events unfold differently, even if the text one reads on the screen is repeated or found in the same places. The universality of universality is broken when the affordances of the medium allow for the altering of "content" during the act of reading. This edit-ability challenges the critic to account for what can be edited, why it requires editing, and what the audience might do with the ability to edit.[56] While the order of specific events within the game are randomized and subject to audience decision making, there are large portions of the game that are *not* decided upon by players.

Player agency is still constrained by the programming decisions made by designers, and if the designer decides to begin players in one scenario, and direct them on a particular path through narrative, then players have little recourse if they wish to follow the game through until its ending. While those who play *Dragon Warrior* might fantasize about rebelling against the king and instead teaming up with the Dragonlord, doing so does not allow for an epic confrontation between the player and the king in a battle for the kingdom. Such a course of events are not, in fact, offered by the designers, and indeed no matter how players react to the multiple contingent proposals they encounter through playing the game, this sequence of events is not made available by the designers. The designers

[56] My use of "editability" here bears close resemblance to Lev Manovich's understanding of new media as "variable." For Manovich, "A new media object is not something fixed once and for all, but something that can exist in different, potentially infinite versions." See Lev Manovich, *The Language of New Media*, (Cambridge, MA: The MIT Press, 2012), 36.

have not created an apparatus to configure the potential contingencies involved in a revolution scenario. Instead of a "universal text" appearing at a semantic level, where the audience interprets "sameness" in the visuals and text, it might be more appropriate to think of the "universal" occurring within the code itself.

Because digital technologies do afford this continued attention, and because these technologies do require individuals to continuously make choices, input commands, and interpret the results of their actions to inform future decisions, the moments of audience interaction with digital technologies requires much deeper attention. For some video game artifacts, including *Dragon Quest* and *Dragon Warrior*, the process of engaging the communication can take over forty hours of game play. Audience action and artifact become intertwined, with components of the artifact unexpressed until the audience performs a particular action. The meaning that emerges from this relationship differs in each moment of play, but game designers still delegate potential events through their use of code. Game designers still delimit some meanings as possible, relegating other possibilities outside the realm of the artifact. But the order of these events depends wholly on how game developers partition player actions in the spaces of game play. Narrative meaning in JRPGs becomes contingent on how much the player decides to coordinate their actions with how game designers want them to act.

Conclusion: Material Contingency and Video Games

Through the computing technologies of the 21st century, humanity has reached a point where the rhetorical process of invention, performance, and dissemination of an "artifact" has been challenged by the affordances of new media. Video games, such as *Dragon Warrior* and its predecessor *Dragon Quest*, are but one manifestation of these affordances. Diverting the flows of electrons through mazes of digital circuitry has allowed us, as a species, to automate so many processes.[57] Video games are the

[57] Automation refers to the sense of replacing human action with technological action. Manovich explains that automation

automation of image, sound, and spatial arrangement, and sometimes those arrangements create a narrative.

The process of game development starts long before the game comes into mind. For *Dragon Warrior*, the rhetorical process began in the multiple interlocking material contingencies of the aesthetics of manga comics and the emergence of the DRPG in the 1980s. *Dragon Quest* circulates among game players in Japan, and Enix sought to make more profits from the game by translating it for an English-speaking American audience. The rhetorical moment of audience engagement became a challenge for video game designers because the fluidity and affordances of computer technology needed overcoming so that a story could be told in a linear process. Yet in each of these moments—from the generic elements taken up by designers, to the audiences interacting with electronic sprites and navigating "virtual" worlds through the interface on their television screen, to the circulation of a poorly selling game through a marketing gimmick—there remains a sense that these were rhetorical activities. Invention, interaction, and circulation are all guided by rhetorical strategies and decisions. Our agency as human beings is not yet eclipsed, and it is because of our relationships to technology that our agency is expanded.[58] However, where we have been placed in this process, and, of course, *when* we are placed in this process says more about our rhetorical agency than anything else. Through attention to the material conditions at each stage of the rhetorical process, from creation to performance to circulation, the multiple possibilities for rhetoric can be understood and communicated. But without this attention to the material in each of these moments, we risk taking for granted the affordances of

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can occur at two levels, a "low level" where "the computer user modifies or creates from scratch a media object using templates or simple algorithms." Manovich also explains "high level" automation, which seeks to replicated the intelligence of human beings and allow for accessing the meaning of objects. See Lev Manovich, *The Language of New Media*, 32-36. See also Leah Lievrouw, "Materiality and Media in Communication and Technology Studies," in *Media Technologies: Essays on Communication, Materiality, and Society*, eds. Tarleton Gillespie, et al. (Cambridge, MA: The MIT Press, 2014), 27-28.

[58] This is, of course, one of the foundational claims in actor network theory. However, it should be acknowledged that actor network theory has been criticized because of Latour's claims that technology has agency. See Lievrouw, "Materiality and Media in Communication and Technology Studies," 29-30.

technologies toward which we have turned a blind eye.

The history of video games is one path for reminding ourselves how material contingencies shift and change over time. Additionally, the history of video games can present rhetoricians with new, reinvigorated ways to examine the issues communication theorists often debate. Rhetorical scholars can contribute much to the understanding of this medium through focusing on how game designers engage digital technologies to recreate and reinvent communication forms. We should seek to contextualize the historical moments of rhetorical invention, both for the game designer and the audience, and understand what material conditions allowed for in terms of expression and exploration. *Dragon Quest* and *Dragon Warrior*, with their movements through multiple consuming publics, their incorporation of generic conventions, and their ability to enable narrative linearity, represent just one drop in an entire sea of video games.

The rhetorical analysis of just one game and its historical contexts, through the revealing lens of materialist contingency, has illuminated numerous rhetorical acts, design choices, and circulatory strategies. But *Dragon Quest* is but a single game, and the product of a pre-internet society. New technological contexts have emerged since 1986, and new material contingencies have certainly taken shape since the Nintendo Entertainment System's dominance in the 1980s. Rhetorical theorists have ample opportunity to explore what the multitudes of video games can tell us about the human ability to argue, create meaning, and utilize our technological contexts to create capital. The interlocking contingencies of genre, movement, and audience action will certainly continue to shape the rhetorical practices of the 21st century. Tacking toward the "material" side of contingency can offer a useful terminology with which to understand these developments.

REFERENCES

1Up Staff, "The 25th Anniversary of Dragon Quest," *1Up*, May 27, 2011. Accessed July 18, 2012 from http://www.1up.com/features/dragon-quest-25th-anniversary.

"50 Issues of Nintendo Power—A View from the Inside Out," *Nintendo Power*, 50 (July 1993): 36-39.

Aarseth, Epsen. "Quest Games as Post-Narrative Discourse," in *Narrative Across Media: The Languages of Storytelling*, edited by Marie-Laure Ryan, 361-76. Lincoln, NE: University of Nebraska Press, 2004.

Aarseth, Epsen. *Cybertext.* Baltimore, MD: John Hopkins University Press, 1997.

Adams, Roe R. "Software Piracy: The Slaying of a Hydra," *Computer Gaming World*, 2 v. 5 (1982): 10, 44. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=2&id=500.

"Akira Toriyama," *Anime News Network*, no date given. Accessed February 24, 2014 from http://www.animenewsnetwork.com/encyclopedia/people.php?id=12.

Altheide, David L. "Media Logic, Social Control, and Fear," *Communication Theory,* 23 n. 3 (2013): 223-38. Accessed June 10, 2015, doi: 10.1111/comt.12017.

Ang, Chee S. "Rules, Gameplay, and Narratives in Video Games" *Simulation Gaming*, 37 n. 3 (2006), 306-25. Accessed June 10, 2015, doi: 10.1177/1046878105285604.

Apperley, Thomas H. "Genre and Game Studies: Toward a Critical Approach to Video Game Genres," *Simulation and Gaming*, 37 n. 1 (2006): 6-23. Accessed June 10, 2015, doi: 10.1177/1046878105282278.

Applegarth, Risa. "Rhetorical Scarcity: Spatial and Economic Inflections on Genre Change," *College Composition and Communication*, 63 n. 3 (2012): 453-83. Accessed June 11, 2015 through ERIC, EBSCO*host*.

Aristotle, *On Rhetoric: A Theory of Civic Discourse,* 2nd ed., translated by George Kennedy. New York: Oxford University Press, 2007.

Barton, Ben F. and Marthalee S. Barton. "Ideology and the Map: Toward a Postmodern Visual Design Practice," in *Central Works in Technical Communication*, edited by Johnson-Eilola, J. and Selber, S. A., 232-252, New York: Oxford University Press, 2004.

Barton, Matt. *Dungeons and Desktops: The History of Computer Role-Playing Games,* Wellesey, MA: A. K. Peters, Ltd. 2008.

Ben Kuchera, "How Nintendo Power Helped Introduce the United States to Console RPGs," *The Penny Arcade Report*, 22 August 2012. Retrieved on August 23, 2013 from http://web.archive.org/web/20120824233622/http://penny-arcade.com/report/editorial-article/how-nintendo-power-helped-introduce-the-united-states-to-rpgs.

Bitzer, Lloyd. "The Rhetorical Situation," *Philosophy and Rhetoric*, 1 n. 1 (1968), 1-14. Accessed June 25, 2015 from EBSCO*host.*

Black, Daniel. "The Virtual Ideal: Virtual Idols, Cute Technology and Unclean Biology," *Continuum: Journal of Media & Cultural Studies*, 22 n. 1 (2008): 37-50. Accessed June 11, 2015, doi: 10.1080/10304310701642048.

Blahuta, Jason P. and Michel S. Beaulieu. *Final Fantasy and Philosophy*, Hoboken, NJ: John Wiley and Sons, 2009.

Bogost, Ian. *Persuasive Games*, Cambridge, MA: The MIT Press, 2007.

Bogost, Ian. *Unit Operations: An Approach to Videogame Criticism.* Cambridge, MA: The MIT Press, 2006.

Bolter, Jay David and Richard Grusin, *Remediation: Understanding New Media*, Cambridge, MA: The MIT Press, 2000.

Bordwell, David. *Narration in the Fiction Film*, London, England: Routledge, 1985.

Borggreen, Gunhild. "Cute and Cool in Contemporary Japanese Visual Arts," *Copenhagen Journal of Asian Studies*, 29 n. 1 (2011), 39-60. Accessed June 11, 2015 from *Business Source Complete*, EBSCO*host.*

Boxer, Steve. "JRPG Legend Hironobu Sakaguchi—Interview," *The Guardian*, 24 February 2012, Accessed May 9, 2013 from http://www.theguardian.com/technology/gamesblog/2012/feb/24/hironobu-sakaguchi-last-story-interview.

Brady Games, "Donkey Kong," *JoyStik*, 1 n. 2 (1982): 12-19. Accessed April 21, 2013 from https://archive.org/details/joystik_magazine.

Brienza, Casey E. "Books, Not Comics: Publishing Fields, Globalization, and Japanese Manga in the United States," *Publishing Research Quarterly,* 25 n. 2 (2009): 101-117. Accessed June 11, 2015, doi: 10.1007/s12109-009-9114-2.

Brunton, Finn and Gabriella Coleman. "Closer to the Metal," in *Media Technologies: Essays on Communication, Materiality, and Society*, editors Tarleton Gillespie, Pablo J. Boczkowski, Kirsten A. Foot, 77-98. Cambridge, MA: The MIT Press, 2014.

Brynjolfsson, Erik and Andrew McAfee, *The Second Machine Age*, New York: W. W. Norton and Company, 2014.

Burke, Kenneth. "The Rhetoric of Hitler's 'Battle,'" in *The Philosophy of Literary Form, California edition,* 191-221. Berkeley, CA: University of California Press, 1973.

Burke, Kenneth. "The Rhetorical Situation," in *Communication: Ethical and Moral Issues,* ed. Lee Thayer, 263-75. London, England: Gordon and Breach, 1973.

Burke, Kenneth. *A Grammar of Motives,* California ed. Berkeley, CA: University of California Press, 1969.

Buse, Peter. "Nintendo and Telos: Will You Ever Reach the End?," *Cultural Critique,* n. 34 (Autumn, 1996): 163-84. Accessed June 10, 2015, doi: 10.2307/1354616.

Campbell, Karlyn Kohrs and Kathleen Hall Jamieson, "Introduction to Form and Genre," in *Methods of Rhetorical Criticism: A Twentieth-century Perspective,* 3rd edition, eds. Bernard L. Brock, Robert L. Scott, and James W. Chesebro, 331-42. Detroit, MI: Wayne State University Press, 1990.

"Celebrity Profile: Michael Dorn," *Nintendo Power,* 7 (1989): 94.

"Celebrity Profile: Wil Wheaton," *Nintendo Power,* 16 (1990): 87-88.

Charland, Maurice. "Constitutive Rhetoric: The Case of the Peuple Québécois," *The Quarterly Journal of Speech,* 73 n. 2 (1987), 133-150. Accessed July 9, 2015 from EBSCO*host*.

Chatman, Seymour. *Story and Discourse: Narrative Structure in Fiction and Film,* Ithaca, New York: Cornell University Press, 1978.

Chen, Yilin. "Staging Sexuality in an All-Male Adaptation of *Romeo and Juliet*" *Studies in Theatre and Performance,* 34 n. 1 (2014), 27-37. Accessed June 25, 2015, doi: 10.1080/14682761.2013.875386.

Cheok, Adrian and Owen Fernando. "Kawaii/Cute Interactive Media," *Universal Access in the Information Society,* 11 n. 3 (2012): 295-309. Accessed on June 11, 2015, doi: 10.1007/s10209-011-0249-5.

Chernus, Ira. *Eisenhower's Atoms for Peace,* College Station, TX: Texas A&M University Press, 2002.

Cifaldi, Frank. "Nintendo's 1985 NES Launch: Retronauts Digs up the Very First NES Advertisement," *1Up,* November 19, (2009). Accessed May 9, 2013 from http://www.1up.com/do/blogEntry?publicUserId=6083368&bId=9010293.

Cifaldi, Frank. "Square Enix Releasing Classic *Dragon Quest* Six Pack in Japan," *Gamasutra: The Art & Business of Making Games.* May 11, 2011. Accessed July 18, 2012 from http://www.gamasutra.com/view/news/124856/Square_Enix_Releasing_Classic_Dragon_Quest_Six_Pack_In_Japan.php.

Cifaldi, Frank. “The Paper Trail: Nintendo Fun Club News (Part 1)” *1Up*, 28 December 2009, Accessed May 10, 2013 from http://www.1up.com/do/blogEntry?publicUserId=6083368&bId=9014722.

Cifaldi, Frank. “The Paper Trail: Nintendo Fun Club News (Part 2)” *1Up*, 7 January 2010, Accessed May 10, 2013 from http://www.1up.com/do/blogEntry?publicUserId=6083368&bId=9015866.

Cloud, Dana L. “The Materiality of Discourse as Oxymoron: A Challenge to Critical Rhetoric” *Western Journal of Communication*, 58 n. 3 (1994), 141-163. Accessed June 25, 2015 from EBSCO*host*.

Collins, Karen. *Game Sound: An Introduction to the History, Theory, and Practice of Video Game Music and Sound Design*, Cambridge, MA: The MIT Press, 2008.

Conley, Thomas M. “The Enthymeme in Perspective,” *Quarterly Journal of Speech*, 70 n. 2 (1984), 168-187. Accessed July 2, 2015 from EBSCO*host*.

Conrad, Charles and Elizabeth A. Macom, “Re-visiting Kenneth Burke: Dramatism/logology and the Problem of Agency” *Southern Communication Journal*, 61 n. 1 (1995), 11-28. Accessed June 25, 2015 from EBSCO*host.*

Consalvo, Mia. “Console Video Games and Global Corporations: Creating a Hybrid Culture,” *New Media Society,* 8. n. 1 (2006): 117-37. Accessed June 10, 2015, doi: 10.1177/1461444806059921.

Consigny, Scott. “Rhetoric and Its Situations,” *Philosophy & Rhetoric*, 7 n. 3 (1974), 175-186. Accessed June 25, 2015 from EBSCO*host*.

Cooper, Hollander & April Halog. “The Most Annoying JRPG Cliches (that we still totally love),” *Gamesradar*, August 3, 2012. Accessed January 8, 2014 from http://www.gamesradar.com/most-annoying-rpg-cliches-we-still-love/.

Coutard, Olivier and Simon Guy. “STS and the City: Politics and Practices of Hope,” *Science, Technology, & Human Values*, 32 n. 6 (2007): 713-734. Accessed June 10, 2015, doi: 10.1117/016224390303600.

Crable, Bryan. “Symbolizing Motion: Burke’s Dialectic and Rhetoric of the Body” *Rhetoric Review,* 22 n. 2 (2003), 121-137. Accessed June 25, 2015, doi:10.1207/S15327981RR22022.

Crawford, Chris. “The Future of Wargaming,” *Computer Gaming World*, 1 n. 1 (1981): 3-7. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=2&id=500.

Danisch, Robert. “Political Rhetoric in a World Risk Society,” *Rhetoric Society Quarterly*, 40 n. 2 (2010), 172-192. Accessed June 25, 2015, doi: 10.1080/02773941003614456.

Davis, Diane. “Identification: Burke and Freud on Who You Are,” *Rhetoric Society Quarterly*, 38 n. 2 (2008), 123-147. Accessed June 25, 2015, doi:10.1080/02773940701779785.

de Souza e Silva, Adriana and Daniel M. Sutko, "Playing Life and Living Play: How Hybrid Reality Games Reframe Space, Play, and the Ordinary," *Critical Studies in Media Communication*, 25 n. 5 (2008): 447-65. Accessed June 10, 2015, doi: 10.1080/15295030802468081.

"'Digital Dementia,' for Our Screen-Addicted Kids" *The Seattle Times*, March 16, 2014, Accessed April 26, 2015 from http://www.seattletimes.com/seattle-news/health/lsquodigital-dementiarsquo-for-our-screen-addicted-kids/.

"Discography," www.NubuoUematus.com, no date listed. Accessed March 27, 2015 from http://www.nobuouematsu.com/disc.html.

Donovan, Tristan. *Replay: The History of Video Games,* East Sussex, England: Yellow Ant, 2010.

"Dr. Slump –Arale-" *Toei Animation*, no date given. Accessed February 24, 2014 from corp.toei-anim.co.jp.

"Dragon Quest NES Sales," *VGChartz.* No date available. Accessed April 15, 2015 from http://dragon-quest.org/wiki/Worldwide_Dragon_Quest_Sales#North_America.

"Dragon Warrior," *Nintendo Fun Club News*, Winter 1987. Accessed July 24, 2013 from http://www.retromags.com/publications/category/united-states/nintendo-fun-club-news#.VXo9XVIsBKg.

"Dragon Warrior," *Nintendo Power,* July/August (1989): 39-50.

"Dragon Warrior," *Nintendo Power,* May/June 1989. Accessed July 30, 2013 from http://www.retromags.com/publications/category/united-states/nintendo-fun-club-news#.VXo9XVIsBKg.

Ekman, Stefan. *Here Be Dragons: Exploring Fantasy Maps and Settings*, Middletown, Connecticut: Wesleyan University Press, 2013).

Engnell, Richard A. "Materiality, Symbolicity, and the Rhetoric of Order: 'Dialectical Biologism' as Motive in Burke," *Western Journal of Communication,* 62 n. 1 (1998), 1-25. Accessed June 25, 2015 from EBSCO*host.*

"Enix on a Quest." Epic Center, *Nintendo Power*, 80 (1996): 60.

Farrell, Thomas B. *Norms of Rhetorical Culture.* New Haven, CT: Yale University Press, 1993.

Fear, Ed. "Sakaguchi discusses the development of Final Fantasy" *Develop*, 13 December 2007, Accessed May 9, 2013 from http://www.develop-online.net/news/sakaguchi-discusses-the-development-of-final-fantasy/0102088.

Finnegan, Cara A. "The Naturalistic Enthymeme and Visual Argument: Photographic Representation in the 'Skull Controversy,'" *Argumentation and Advocacy*, 37 n. 3 (2001) 133-149. Accessed June 25, 2015 from EBSCO*host*.

Finnegan, Cara A. and Jiyeon Kang, "'Sighting' the Public: Iconoclasm and Public Sphere Theory," *Quarterly Journal of Speech*, 90 n. 4 (2004): 377-402. Accessed June 10, 2015, doi: 10.1080/0033563042000302153.

Fisher, Walter R. "The Narrative Paradigm: An Elaboration," in *Methods of Rhetorical Criticism, 3rd edition,* edited by Bernard L. Brock, Robert L. Scott, and James W. Chesebro, 234-254. Detroit, MI: Wayne State University Press, 1990.

Foley, Megan "The Presidency as Pastiche: Atomization, Circulation, and Rhetorical Instability," *Rhetoric & Public Affairs*, 15 n. 4 (2012), 623-634. Accessed June 25, 2015 from EBSCO*host*.

Ford, William K. "Copy game for High Score: The First Video Game Lawsuit," *Journal of Intellectual Property Law,* 20 n. 1 (2012): 1-41. Accessed June 11, 2015 *Academic Search Complete*, EBSCO*host.*

Frasca, Gonazlo. "Simulation versus Narrative: Introduction to Ludology." in *The Video Game Theory Reader,* edited by Mark J. P. Wolf and Bernard Perron, 221-35. New York: Routledge, 2003.

Frasca, Gonzalo. "Simulation versus Narrative" In *The Video Game Theory Reader,* edited by Wolf, Mark J. P. and Perron, Bernard, 221-235 (New York: Routledge, 2003. Accessed June 25, 2015 from http://interactive.usc.edu/blog-old/wp-content/uploads/2011/01/Simulation_vs_Narrative.pdf.

Freeman, Jon. "The Name of the Game," *Computer Gaming World*, 3 n. 5 (1983): 25. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

Gann, Patrick. "Dragon Quest Suite," *RPGFan*, No Date Listed, Accessed March 27, 2015 from http://www.rpgfan.com/soundtracks/dq1-ss/.

Gaudiosi, John. "Mobile Game Revenues Set to Overtake Console Games in 2015." *Fortune,* January 15, 2015. Accessed March 21, 2015 from http://fortune.com/2015/01/15/mobile-console-game-revenues-2015/.

Gee, James P. "Stories, probes, and games," *Narrative Inquiry,* 21 n. 2 (2011): 353-57. . Accessed June 10, 2015, doi: 10.1075/ni.21.2.14gee.

Gibson, James J. *The Ecological Approach to Visual Perception*, Boston, MA: Houghton Mifflin Company, 1979.

Gifford, Kevin. "Hironobu Sakaguchi on Final Fantasy I's Roller-Coaster Development," *1Up*, 21 December 2011. Accessed on May 9, 2013 from http://www.1up.com/news/hironobu-sakaguchi-final-fantasy-roller-coaster.

Goldman, Tom. "*Dragon Quest's* JRPG Mascot Inspired by Western RPG," *The Escapist*, July 9, 2010. Accessed March 26, 2015 from http://www.escapistmagazine.com/news/view/101991-Dragon-Quests-JRPG-Mascot-Inspired-By-Western-RPG.

Goodman, Danny. “Home Video: How Do You Choose?,” *JoyStik*, 1 n. 2 (November 1982): 56-57. Accessed April 21, 2013 from https://archive.org/details/joystik_magazine.

Gorrell, Donna. “The Rhetorical Situation Again: Linked Components in a Venn Diagram,” *Philosophy & Rhetoric*, 30 n. 4 (1997), 395-412. Accessed June 25, 2015 from EBSCO*host.*

Gries, Laurie E. “Iconographic Tracking: A Digital Research Method for Visual Rhetoric and Circulation Studies,” *Computers and Composition*, 30 n. 4 (2013): 332-48. Accessed June 11, 2015, doi: 10.1016/j.compcom.2013.10.006.

Gunn, Joshua and Dana L. Cloud. “Agentic Orientation as Magical Voluntarism,” *Communication Theory,* 20 n. 1 (2010), 50-78. Accessed June 25, 2015, doi:10.1111/j.1468-2885.2009.01349.x.

Havelock, Eric. *The Muse Learns to Write,* New Haven, CT: Yale University Press, 1986.

Hawhee, Debra. “Language as Sensuous Action: Sir Richard Paget, Kenneth Burke, and Gesture-Speech Theory,” *Quarterly Journal of Speech,* 92 n. 4 (2006), 331-354. Accessed June 25, 2015, doi:10.1080/00335630601080393.

Herman, David. “Introduction,” in *The Cambridge Companion to Narrative*, ed. David Herman, 3-21, New York: Cambridge University Press, 2007.

Horii, Yuji and Koichi Nakamura, *Dragon Quest,* Tokyo, Japan: Enix Corporation, 1986.

Horii, Yuji and Koichi Nakamura, *Dragon Warrior*, Tokyo, Japan: Enix Corporation, 1989.

Infocom. “We Unleash the World’s Most Powerful Graphics Technology,” *Softline,* 3 n. 1 (1983): 6-7. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=6&id=500.

“Inside Ultima IV,” *Computer Gaming World*, n. 26 (1986), 18-21. Accessed June 11, 2015 from http://www.cgwmuseum.org/galleries/index.php?year=1986&pub=2&id=500.

Jacky, Jonathon P. and Ira J. Kalet, “An Object-oriented Programming Discipline for Standard Pascal,” *Communications of the ACM*, 30 n. 9 (1987): 772-776. Accessed June 11, 2015, doi: 10.1145/30401.30403.

Jamieson, Kathleen M. Hall. “Generic Constraints and the Rhetorical Situation,” *Philosophy & Rhetoric*, 6 n. 3 (1973), 162-170. Accessed June 25, 2015 from EBSCO*host*.

Jantzen, Gitte and Jans F. Jensen. "Powerplay-Power, Violence and Gender in Video Games." *AI & Society,* 7 n. 4 (1993): 368-85. Accessed June 10, 2015, doi: 10.1007/BF01891418.

Jasanoff, Sheila. “The idiom of co-production,” in *States of Knowledge: The Co-production of Science and the Social Order*, ed. Sheila Jasanoff, 1-12. New York: Routledge, 2006.

Jasinski, James. “Contingency,” in *Sourcebook on Rhetoric: Key Concepts in Contemporary Rhetorical Studies*, 108-113, Thousand Oaks, CA: Sage Publications, 2001.

Jasinski, James. “Enthymeme,” in *Sourcebook on Rhetoric: Key concepts in Contemporary Rhetorical Studies*, 205-9. Thousand Oaks, CA: Sage Publications, 2001.

Jasinski, James. “Narrative,” In *Sourcebook on Rhetoric: Key Concepts in Rhetorical Studies*, 389-406, Thousand Oaks, CA: Sage Publications, 2001.

Jenkins, Henry. *Convergence Culture*, New York: New York University Press, 2006.

Jones, Leigh A. “Podcasting and Performativity: Multimodal Invention in an Advanced Writing Class,” *Composition Studies*, 38 n. 2 (2010), 75-91. Accessed June 25, 2015 from http://www.compositionstudies.uwinnipeg.ca/archives/382.html.

“Just when you thought it was safe to go back underground again.” *Softline*, 1 n. 4 (1982): 60, Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=6&id=500.

Kalata, Kurt. “A Japanese RPG Primer: The Essential 20,” *Gamasutra*, March 19, 2008. Accessed March 26, 2015 from http://www.gamasutra.com/view/feature/131985/a_japanese_rpg_primer_the_.php.

Kalata, Kurt. “The History of Dragon Quest,” *Gamasutra: The Art & Business of Making Games*. February 4, 2008. Accessed July 18, 2012 from http://www.gamasutra.com/view/feature/131926/the_history_of_dragon_quest.php.

Katz, Arnie. “1984: The Year that Shook Electronic Gaming,” *Electronic Games Magazine*, January (1985): 30-31. Accessed June 11, 2015 from https://archive.org/details/electronic-games-magazine.

Kent, Steven L. *The Ultimate History of Video Games: From Pong to Pokemon and Beyond—The Story Behind the Craze that Touched our Lives and Changed the World*, Roseville, CA: Prima Publishing, 2001.

King, Andrew. “Scholarship Yesterday, Today, and Tomorrow,” *Quarterly Journal of Speech*, 101 n. 1 (2015): 127-31.

Kirkland, Ewan “Restless Dreams in Silent Hill: Approaches to Video Game Analysis,” *Journal of Media Practice*, 6 n. 3 (2005): 167-78. Accessed June 10, 2015, doi: 10.1386/jmpr.6.3.167/1.

Klapproth, Daniele M. *Narrative as Social Practice: Anglo-Western and Australian Aboriginal Oral Traditions*, Berlin: Mouton de Gruyter, 2004.

Kline, Stephen, Nick Dyer-Witherford, and Greig De Peuter, *Digital Play: The Interaction of Technology, Culture, and Marketing*, Montreal, Canada: McGill-Queen’s University Press, 2003.

Koehler, Adam. “Digitizing Craft: Creative Writing Studies and New Media—A Proposal,” *College English*, 75 n. 4 (2013), 379-397. Accessed June 25, 2015 from http://www.ncte.org/journals/ce/issues/v75-4.

Kohler, Chris. *Power Up: How Japanese Video Games Gave the World an Extra Life*, Indianapolis, IN: Brady Games, 2004.

Kollar, Phil. "This Generation's Must-Play JRPGs" *Game Informer*, March 26, 2012, Accessed January 8, 2014 from www.gameinformer.com.

Krippendorff, Klaus. *The Semantic Turn: A New Foundation for Design*, Boca Raton, FL: Taylor and Francis, 2006.

KryptonWare Solutions, "System Information: Nintendo – NES," Accessed July 23, 2013 from www.kryptonware.com.

Kuchera, Ben. , "How Nintendo Power Helped Introduce the United States to Console RPGs," *The Penny Arcade Report*, August 22, 2012. Accessed August 23, 2013 from http://web.archive.org/web/20120824233622/http://penny-arcade.com/report/editorial-article/how-nintendo-power-helped-introduce-the-united-states-to-rpgs

Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford, England: Oxford University Press, 2005.

Latour, Bruno. "Technology is Society Made Durable" *The Sociological Review*, 38 n. S1 (1990), 103-31. Accessed July 3, 2015, doi: 10.1111/j.1467-954X.1990.tb03350.x.

Latour, Bruno and Steve Woolgar. *Laboratory Life: The Construction of Scientific Facts*, Princeton, NJ: Princeton University Press, 1979.

Latour, Bruno as Jim Johnson. "Mixing Humans and Nonhumans Together: The Sociology of a Door-Closer," *Social Problems*, 35 n. 3 (1988): 298-310. Accessed June 10, 2015, doi: 10.2307/800624.

Lawlor, Margaret-Anne and Andrea Prothero, "Pester Power-A Battle of Wills between Children and Their Parents," *Journal of Marketing Management*, 27 n. 5-6 (2011): 561-581. Accessed June 11, 2015, doi: 10.1080/0267257X.2010.495281.

LeFevre, Karen Burke. *Invention as a Social Act*, Carbondale, IL: Southern Illinois University Press, 1987.

Lemarque, Peter. "On Not Expecting Too Much from Narrative" *Mind & Language*, 19 n. 4 (2004), 393-408. Accessed June 25, 2015; doi:10.1111/j.0268-1064.2004.00265.x.

Levi, Antonia. "The Sweet Smell of Japan: Anime, Manga, and Japan in North America," *Journal of Asian Pacific Communication*, 23 n. 1 (2013): 3-18. Accessed June 11, 2015, doi: 10.1075/japc.23.1.02lev.

Lievrouw, Leah. "Materiality and Media in Communication and Technology Studies," in *Media Technologies: Essays on Communication, Materiality, and Society*, 21-52, edited by Tarleton Gillespie, Pablo J. Boczkowski, and Kirsten A. Foot. Cambridge, MA: The MIT Press, 2014.

Loguidice, Bill and Matt Barton. "Final Fantasy VII (1997): It's Never Final in the World of Fantasy," in *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, 77-92, Amsterdam, Netherlands: Focal Press, 2009.

Loguidice, Bill and Matt Barton. "*Ultima* (1980): The Immaculate Conception of the Computer Role-Playing Game," *Vintage Games An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, 335-52, Amsterdam, Nederthlands: Focal Press, 2009.

Lombardy, Dana. "Inside the Industry," *Computer Gaming World*, 3 n. 4 (1983): 4. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

Lombardy, Dana. "Inside the Industry," *Computer Gaming World*, 3 n. 3 (1983): 2. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

Lombardy, Dana. "Inside the Industry." *Computer Gaming World*, 3 n. 2 (1983): 2. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

Long, David. "ELECTRONIC ARTS: Trip Hawkin's Dream Come True," *Computer Gaming World*, 3 n. 5 (1983): 10-11. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

Lüders, Marika, Lin Prøitz and Terje Rasmussen. "Emerging Personal Media Genres," *New Media Society*, 12 n. 6 (2010): 947-63. Accessed June 10, 2015, doi: 10.1177/1461444809352203.

Mackey, Bob. "Smart Bombs," *1up.com*, 5 February 2007, Accessed August 23, 2013 from http://www.1up.com/features/smart-bombs?pager.offset=0.

Malaby, Thomas. *Making Virtual Worlds: Linden Lab and Second Life*, Ithaca, NY: Cornell University Press, 2009.

Manovich, Lev. *The Language of New Media*, Cambridge, MA: The MIT Press, 2012.

Marlow, Mark. "Wizardry: The Proving Grounds of the Mad Overlord, a Review," *Computer Gaming World*, 2 n. 3 (1982): 6-8. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=2&id=500.

Martin, Jennifer L. "Tights vs. Tattoos: Filmic Interpretations of 'Romeo and Juliet,'" *The English Journal*, 92 n. 1 (2002), 41-46. Accessed June 25, 2015, doi:10.2307/821945.

Matt Barton. *Dungeons and Desktops: The History of Computer Role-Playing Games*, Wellesley, MA: A. K. Peters, Ltd., 2008.

McGee, Michael Calvin. "Text, Context, and the Fragmentation of American Culture," *Western Journal of Communication*, 54 n. 3 (1990): 274-289. Accessed June 25, 2015 from EBSCO*host*.

McKee, Heidi. "Sound Matters: Notes toward the Analysis and Design of Sound in Multimodal Webtexts," *Computers and* Composition, 23 n. 3 (2006): 335-354. Accessed June 11, 2015, doi: 10.1016/j.compcom.2006.06.003.

McKerrow, Raymie E. "'Research in Rhetoric' Revisited," *Quarterly Journal of Speech,* 101 n. 1 (2015): 151-61. Accessed July 9, 2015, doi: 10.1080/00335630.2015.994915.

McLuhan, Marshall. *Understanding Media, MIT Press edition*, Cambridge, MA: The MIT Press, 1994.

McPherson, James A. "ULTIMA II: A Review," *Computer Gaming World,* 3 n. 2 (1983): 23, 55. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

Medhurst, Martin J. "Looking Back on Our Scholarship: Some Paths Now Abandoned," *Quarterly Journal of Speech,* 101 n. 1 (2015): 186-96. Accessed July 9, 2015, doi: 10.1080/00335630.2015.999995.

Miller, Carolyn R. "Genre as Social Action," *Quarterly Journal of Speech,* 70 n. 2 (1984): 151-67. Accessed June 10, 2015, through ERIC.

Miller, Laura "Cute Masquerade and the Pimping of Japan," *International Journal of Japanese Sociology,* 20 n. 1 (2011): 18-29. Accessed June 11, 2015, doi: 10.1111/j.1475-6781.2011.01145.x.

Mindell, David A. *Digital Apollo: Human and Machine in Spaceflight*, Cambridge, MA: The MIT Press, 2008.

Misaka, Karou. "The First Japanese Manga Magazine in the United States," *Publishing Research Quarterly,* 19 n. 4 (2004): 23-30. Accessed June 11, 2015 from *Library & Information Science Source*, EBSCO*host.*

Moriarty, Colin. "Are JRPGs Primed for a Comeback?" *IGN*, February 2, 2015. Accessed March 26, 2015 from http://www.ign.com/articles/2015/02/02/are-jrpgs-primed-for-a-comeback.

Myers, David. "Atari: Exploiting the Human Connection," *Computer Gaming World*, 2 n. 5 (1982): 14-15. Accessed on March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=2&id=500.

Nintendo of America and Enix Corporation, *Dragon Warrior Instruction Booklet*, Redmond, WA: Nintendo of America, Inc., 1989. Accessed October 26, 2013 from http://www.woodus.com/den/gallery/graphics/dw1nes/manual/dw1nes_manual.pdf.

Norman, Don. *The Design of Everyday Things*, *Expanded Edition*, New York: Basic Books, 2013.

Nutt, Christian and Benjamin Turner. "Nintendo Famicom: 20 Years of Fun," *Gamespy*, July 3, 2005. Accessed December 4, 2014 from http://archive.gamespy.com/articles/july03/famicom/index5.shtml.

Nutt, Christian. “Analysis: Why is *Dragon Quest IX* so Popular?,” *Gamasutra*, 29 July 2009, Accessed April 13, 2015 from http://www.gamasutra.com/view/news/115327/Analysis_Why_Is_Dragon_Quest_IX_So_Popular.php.

O’Donnell, Casey. “Production Protection to Copy(right) Protection: From the 10NES to DVDs,” *IEEE Annals of the History of Computer*, 31 n. 3 (2009): 54-63. Accessed April 22, 2013 from *Business Source Complete*, EBSCO*host*.

O’Keefe, Daniel J. “Burke’s Dramatism and Action Theory,” *Rhetoric Society Quarterly,* 8 n. 1 (1978), 8-15. Accessed June 25, 2015 from EBSCO*host.*

O’Rourke, Sean Patrick. “Circulation and Noncirculation of Photographic Texts in the Civil Rights Movement: A Case Study of the Rhetoric of Control,” *Rhetoric & Public Affairs,*15 n. 4 (2012): 685-94. Accessed June 11, 2015 from *Communication & Mass Media Complete*, EBSCO*host.*

Odoerfer, Mandi. “Why 2013 was the Year of the JRPG,” December 25, 2013, Accessed January 8, 2014 from http://www.gamezone.com/originals/why-2013-was-the-year-of-the-jrpg.

O'Donnell, Casey. “The Nintendo Entertainment System and the 10NES Chip: Carving the Video Game Industry in Silicon,” *Games and Culture,* 6 n. 1 (2011): 83-100. Accessed June 10, 2015, doi: 10.1177/1555412010377319.

Olson, Lester C. “Pictorial Representations of British America Resisting Rape: Rhetorical Re-Circulation of a Print Series Portraying the Boston Port Bill of 1774,” *Rhetoric & Public Affairs*, 12 n. 1 (2009): 1-36. Accessed June 10, 2015, doi: 10.1353/rap.0.0090.

Olson, Lester C. “Pictorial Representations of British America Resisting Rape: Rhetorical Re-Circulation of a Print Series Portraying the Boston Port Bill of 1774,” *Rhetoric & Public Affairs*, 12 n. 1 (2009): 1-36. Accessed on June 11, 2015, doi: 10.1353/rap.0.0090.

On-line Systems. “Hi-Res Adventure,” *Softline* 1 n. 1 (1981): 16. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.

On-line Systems. advertisement, *Softline*, 1 n. 2 (1981): 13. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.

On-line Systems. advertisement, *Softline*, 1 n. 3 (1981): 14. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.

Orland, Kyle. “Today’s Atari Bankruptcy Latest in a Long History of Corporate Deaths,” *Arstechnica*, 21 January 2013. Accessed June 11, 2015 from http://harusuk.com/gaming/2013/01/todays-atari-bankruptcy-latest-in-a-long-history-of-corporate-deaths/.

Parish, Jeremy. “Koichi Nakamura Interview: On the Birth of the Console RPG,” *1Up.com*, August 7, 2010. Accessed March 26, 2015 from http://www2.1up.com/features/koichi-nakamura-interview-console-rpg.

Pfau, Michael William. “Who's Afraid of Fear Appeals? Contingency, Courage, and Deliberation in Rhetorical Theory and Practice,” *Philosophy and Rhetoric*, 40 n. 2 (2007): 216-37. Accessed June 10, 2015, doi: 10.1353/par.2007.0024.

Picard, Martin. “The Foundation of Geemu: A Brief History of Early Japanese Video Games,” *Game Studies,* 13 n. 2 (2013): paragraph 24. Accessed 2 February 2014, from http://www.gamestudies.org/1302/articles/picard.

Pitcher, Jenna. “Game Industry Revenue May Hit $100 Billion by 2018, Says Research Firm,” *Polygon*, June 25, 2014. Accessed March 21, 2015 from http://www.polygon.com/2014/6/25/5840882/games-industry-revenue-hit-100-billion-by-2018-dfc-Intelligence.

Rice, Jenny Edbauer. “Rhetoric’s Mechanics: Retooling the Equipment of Writing Production,” *College Composition and Communication,* 60 n. 2 (2008), 366-387. Accessed June 25, 2015 from http://www.ncte.org/cccc/ccc/issues/v60-2.

Rose, Ken. “Adventures in Adventuring: Please Parse the Zork,” *Softline,* 1 n. 4 (1982): 14-17. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=6&id=500.

Rose, Ken. “Origins of the Adventure,” *Softline,* 1 n. 2 (1981), 6-8. Accessed April 3, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.

Ryan, Jeff. *Super Mario: How Nintendo Conquered America*, New York: Penguin Publishing, 2012.

Ryan, Marie-Laure. “Introduction,” In *Narrative Across Media: The Languages of Storytelling*, edited by Marie-Laure Ryan, 1-40. Lincoln, NE: University of Nebraska Press, 2004.

Ryan, Marie-Laure. “Toward a Definition of Narrative,” in *The Cambridge Companion to Narrative,* edited by David Herman, 22-38. New York, NY: Cambridge University Press, 2007.

Ryan, Marie-Laure. “Will New Media Produce New Narratives” in *Narrative Across Media*, edited by Marie-Laure Ryan, 337-359. Lincoln, NE: University of Nebraska Press, 2004.

Santos, Marc C. and Mark H. Leahy, “Postpedagogy and Web Writing” *Computers and Composition*, 32 (2014), 84-95. Accessed June 25, 2015, doi:10.1016/j.compcom.2014.04.006.

Sawminatha, Nikhil. “Digging into Technology’s Past,” *Archaeology*, 64 n. 4 (2011), 30-33. Accessed June 11, 2015 from *Academic Search Complete,* EBSCO*host.*

Schreier, Jason. “Why Do People Care About JRPGs?” *Kotaku,* June 29, 2012. Accessed March 26, 2015 from http://kotaku.com/5921080/why-do-people-care-about-jrpgs.

Schwartz, John. “Zap! Zap! Video Games are Back!” *Newsweek,* U. S. Edition, March 14, 1988: 39. Accessed July 16, 2012 through LexisNexis academic.

Seligmann-Silva, Marcio. "Contingency," *Theory Culture Society,* 23 n. 2-3 (2006): 135-38. Accessed June 10, 2015, doi: 10.1177/0263276406023002114.

Shipka, Jody. "Sound Engineering: Toward a Theory of Multimodal Soundness," *Computers and Composition,* 23 (2006), 355-373. Accessed June 25, 2015, doi:10.1016/j.compcom.2006.05.003.

Sierra On-line. "Ultima II Advertisement," *Computer Gaming World,* 3 n. 2 (1983): 24. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

Simonson, Peter. "Reinventing Invention, Again," *Rhetoric Society Quarterly,* 44 n. 4 (2014), 299-322. Accessed June 25, 2015, doi:10.1080/02773945.2014.938862.

Sipe, Russell. "Computer Games in 1983: A Report," *Computer Gaming World,* 3 n. 2 (1983): 10-11. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

Small, David and Sandy Small. "Computer Games '82: DnD," *JoyStik,* 1 n. 1 (September 1982): 56-59. Accessed April 21, 2013 from https://archive.org/details/joystik_magazine.

St. Andre, Ken. "C64 Defended," *Computer Gaming World,* 3 n. 6 (1983): 15, 50. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1983&pub=2&id=500.

Stahl, Roger. "Have you Played the War on Terror?" *Critical Studies in Media Communication,* 23 n. 2 (2006): 112-30. Accessed June 10, 2015, doi: 10.1080/07393180600714489.

Sterling, Jim. "How Survival Horror Evolved itself into Extinction" *Destructiod,* December 8, 2008. Accessed April 28, 2012 from http://www.destructoid.com/how-survival-horror-evolved-itself-into-extinction-114022.phtml.

Stuckey, Mary E. "On Rhetorical Circulation," *Rhetoric & Public Affairs,* 15 n. 4 (2012): 609-612. Accessed June 11, 2015 from *Communication & Mass Media Complete*, EBSCO*host.*

Suellentrop, Chris. "Death Threats, and Other Growing Pains: Why 2014 was a Troubling Year for Video Games," *New York Times*, December 11, 2014. Accessed March 2015 from http://www.nytimes.com/2014/12/14/arts/video-games/why-2014-was-a-troubling-year-for-video-games.html.

Taylor, Emily. "Dating-Simulation Games: Leisure and Gaming of Japanese Youth Culture," *Southeast Review of Asian Studies,* 29 (2007): 192-208. Accessed June 11, 2015 from *Academic OneFile*.

Their, Dave. "Computer Legend and Gaming Pioneer Jack Tramiel Dies at Age 83," *Forbes,* April 9, 2012. Accessed May 10, 2015 from http://www.forbes.com/sites/davidthier/2012/04/09/computer-legend-and-gaming-pioneer-jack-tramiel-dies-at-age-83/.

Thomson, Deborah M. “Marshmallow Power and Frooty Treasures: Disciplining the Child Consumer through Online Cereal Advergaming” *Critical Studies in Media Communication*, 27 n. 5 (2010): 438-54. Accessed June 10, 2015, doi: 10.1080/15295030903583648.

Tilden, Gail, Pam Sather, and Howard Philips, *Dragon Warrior Strategy Guide*, Redmond, WA: Nintendo of America, 1989.

Tomlinson, Elizabeth C. “The Role of Invention in Digital Dating Site Profile Composition,” *Computers and Composition*, 30 (2013), 115-128. Accessed June 25, 2015, doi:10.1016/j.compcom.2013.04.003.

Tommervik, Allan. “The Great Arcade/Computer Controversy, Part 1: The Publishers and the Pirates,” *Softline*, 1 n. 3 (1982): 18-22. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1982&pub=6&id=500.

“Top 30,” *Nintendo Power*, January/February (1990): 48-49.

“Top 30,” *Nintendo Power*, July/August (1990): 66-67.

“Top 30,” *Nintendo Power*, March/April (1990): 40-41.

“Top 30,” *Nintendo Power*, May/June (1990): 42-43.

“Top 30,” *Nintendo Power*, September/October (1990): 15-16.

Vatz, Richard E. “The Myth of the Rhetorical Situation,” *Philosophy & Rhetoric*, 6 n. 3 (1973), 154-161. Accessed June 25, 2015 from EBSCO*host*.

“Viz to Release Legendz and Dr. Slump Manga in 2005,” *Anime News Network*, December 16, 2004, Accessed February 24, 2014 from http://www.animenewsnetwork.com/press-release/2004-12-16/viz-to-release-legendz-and-dr-slump-manga-in-2005.

Voorhees, Gerald. “The Character of Difference: Procedurality, Rhetoric, and Roleplaying Games,” *Game Studies*, 9 n. 2 (2009). Accessed July 18, 2012 from http://gamestudies.org/0902/articles/voorhees.

Warner, Michael. “Publics and Counterpublics (abbreviated version),” *Quarterly Journal of Speech*, 88 n. 4 (2002): 413-25. Accesses June 11, 2015, doi: 10.1080/00335630209384388.

Warner, Michael. *Publics and Counterpublics*, Brooklyn, NY: Zone Books, 2002.

Way, Geoffrey. “Social Shakespeare: Romeo and Juliet, Social Media, and Performance,” *Journal of Narrative Theory*, 41 n. 3 (2011), 401-420. Accessed June 25, 2015, doi:10.1353/jnt.2011.0096.

Wells, Susan. “Genres as Species and Spaces: Literary and Rhetorical Genre in *The Anatomy of Melancholy,” Philosophy and rhetoric*, 47 n. 2 (2014): 113-136. Accessed June 11, 2015, doi: 10.5325/philrhet.47.2.0113.

Williams, John. "*Ultima*," *Softline*, 1 n. 1 (1981): 18. Accessed March 30, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.

Williams, Ken. "Apple II Graphics: An Inside Look," *Softline*, 1 n. 1 (1981): 8-11, 21-25. Accessed April 3, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.

Williams, Ken. "Apple II Graphics: Mapping the Memory Maze," *Softline* 1 n. 2 (1981): 9-12. Accessed April 3, 2013 from http://www.cgwmuseum.org/galleries/index.php?year=1981&pub=6&id=500.

Wise, J. MacGregor. *Exploring Technology and Social Space*, Thousand Oaks, CA: Sage Publications, 1997.